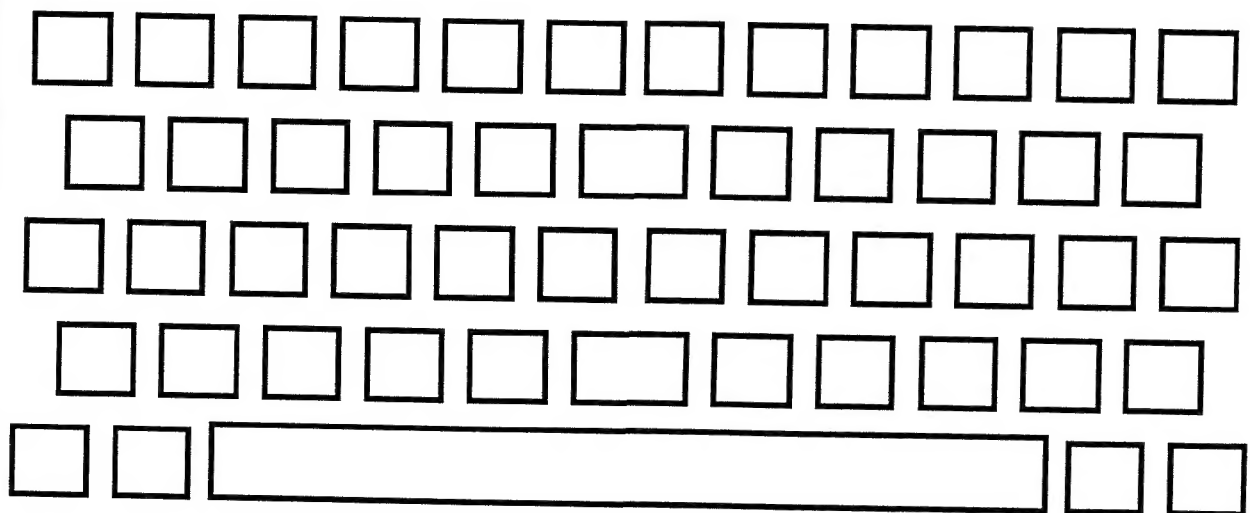
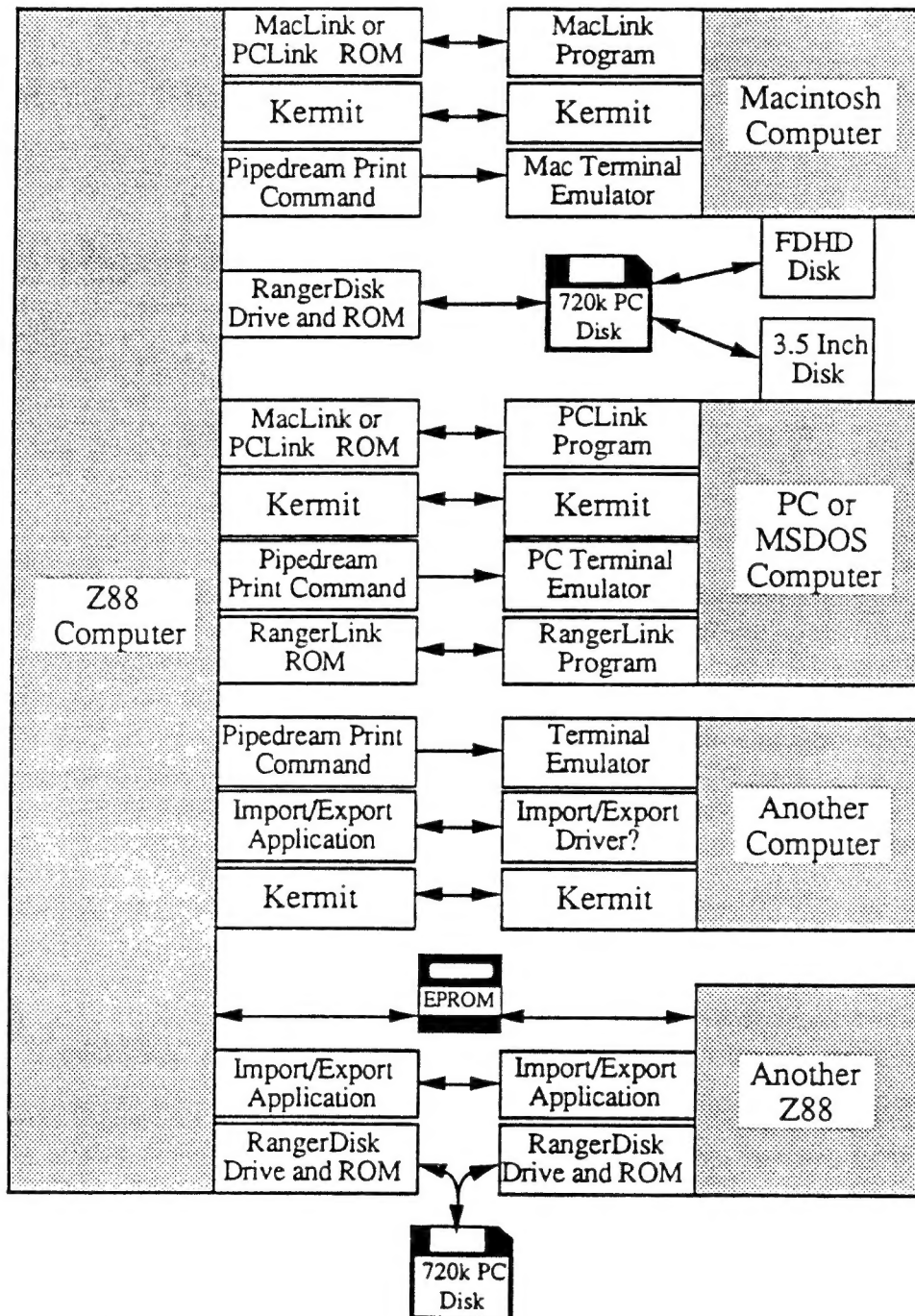


**Z88 Manual A,B,other**



**Domino Cubes<Mike Fink**

## Some Possible Links Between the Z88 and Other Computers

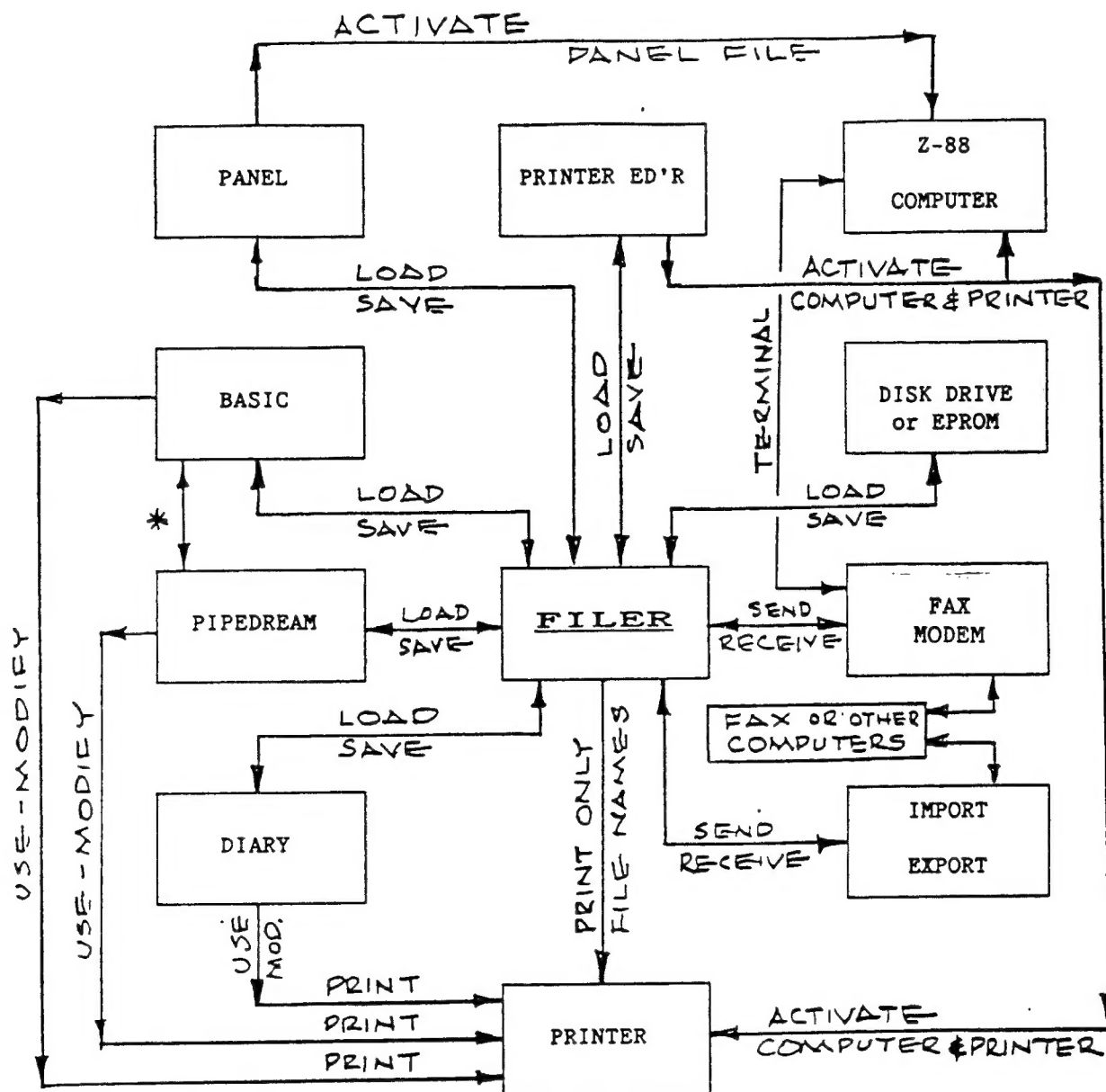


IS THERE ANYTHING THE Z88 CANNOT DO ??

# MANUAL A

(C) 1989 MIKE FINK

## Z-88 FLO-CHART



ANY DATA, TYPED INTO PIPEDREAM, DIARY OR PROGRAMS IN BASIC, WILL AUTOMATICALLY BE TEMPORARILY SAVED IN SUSPENDED ACTIVITIES, WHEN GOING FROM ONE APPLICATION TO ANOTHER. TO SAVE A FILE PERMANENTLY, IT MUST HAVE A NAME AND BE SAVED TO THE FILER. DATA TYPED INTO THE PANEL CAN BE ACTIVATED IMMEDIATELY, OR SAVED AS A FILE, OR BOTH.

PRINTER EDITOR MODIFICATION MUST BE ACTIVATED TO BE USED, OR CAN EXIST UNACTIVATED AS FILES TO BE LOADED OR SAVED (OR ACTIVATED).

FILES FROM PIPEDREAM, DIARY AND BASIC CAN BE SENT TO A PRINTER FOR PRINTING, EVEN IF THEY HAVE NOT BEEN NAMED AND SAVED. FILES FROM THE FILER TO THE THE DISK DRIVE, CAN ONLY BE SAVED OR LOADED, TO USE OR EXECUTE THEM, THEY MUST FIRST BE LOADED INTO WHERE THEY CAME FROM.

\* SEE ADVANCED MANUAL B

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PRESIDENT MIKE FINK

THIS MANUAL WAS WRITTEN TO ALLOW PEOPLE WHO KNOW NOTHING ABOUT COMPUTERS BUT CAN READ AND UNDERSTAND ENGLISH, TO SIT DOWN AND USE AND ENJOY THIS REMARKABLE COMPUTER AT ITS FIRST LEVEL OF VERSATILITY. AFTER USING THE Z-88 FOR A SHORT TIME, YOU WILL BE ANXIOUS TO MASTER ALL THE VARIOUS AND WONDERFUL THINGS IT CAN DO FOR YOU. THIS WILL REQUIRE READING THE ADVANCED MANUAL, (MAN-B) .

MANUAL A-PART 1

♥ PIPEDREAM ♥

THERE ARE TWO KEYS ON THE KEYBOARD THAT ARE DESIGNS, ONE IS A SQUARE THE OTHER IS A DIAMOND. IN THIS MANUAL, I WILL USE THE SHAPES TO DENOTE THE KEYS; ie; ◆ = DIAMOND and ■ = SQUARE.

1. INSTALL 4 ALKALINE 'AA' BATTERIES AS SHOWN ON PAGE 7 OF CAMBRIDGE'S MANUAL, THEN INSTRUCTION 2 OF THIS MANUAL.
2. FIND A PAPER CLIP OR A ROUND WOODEN TOOTHPICK, TO ALLOW YOU TO ENTER THE SMALL HOLE ON THE LEFT SIDE OF THE Z-88, BETWEEN THE BIG HOLE AND THE ESCAPE KEY. THE SMALL HOLE IS CLOSER TO THE BIG HOLE. THE BIG HOLE IS WHERE THE 6 VOLT AC ADAPTER IS PUT IN .. WHEN YOU WISH TO USE ELECTRICITY. INSERT THE ROUND SMALL ROD GENTLY INTO THE HOLE AND PUSH THE RESET BUTTON TWICE TO ACTIVATE THE COMPUTER. see P.21 CMBR. MAN.
3. BETWEEN THE TAB & ESC KEYS ON THE LEFT SIDE, IS A ROTATING SWITCH TO ROTATE FOR SCREEN CONTRAST.
4. PRESS BOTH SHIFT KEYS AT THE SAME TIME, TO TURN COMPUTER OFF AND ON
5. THE COMPUTER WILL AUTOMATICALLY TURN ITSELF OFF IN 5 MINUTES IF NO ACTIVITY IS SENSED. THE PANEL Timeout (MINUTES) 5; CAN BE CHOSEN FROM 0 TO 99 IN INTEGERS. SEE ITEM 17. SEE PANEL PAGE.
6. PRESS THE KEY WITH THE SQUARE AND T. SEE CLOCK, P. 70 CMBR. MAN. THE CLOCK IS ONE OF THE APPLICATIONS THAT DOES NOT TURN ITSELF OFF !!!! WEARING OUT THE BATTERY!! SEE ITEM 26.
7. TAKE A DEEP BREATH; WE ARE ABOUT TO LEARN HOW TO USE AND ENJOY THE FANTASTIC Z-88 !!!!
8. PRESS INDEX KEY, THE SCREEN SHOULD SHOW TWO COLUMNS, THE LEFT ONE IS LABELLED APPLICATIONS, THE RIGHT ONE SUSPENDED ACTIVITIES.
9. UNDER APPLICATIONS, ONE OF THE CATEGORIES IS COVERED WITH AN INVERSE COLORING CALLED 'A HIGHLIGHT', AND IS MOVABLE left, right, up or down BY THE left, right, up or down ARROWS AT THE LOWER RIGHT OF KEYBOARD.
10. THE LIST OF APPLICATIONS SHOWS THE FUNCTIONS THAT ARE AVAILABLE. MORE CAN BE ADDED BY INSERTING OTHER ROM IN THE SLOTS.
11. PRESSING ENTER WILL TAKE YOU TO THE HI-LIT APPLICATION. THERE ARE OTHER WAYS TO REACH EACH APPLICATION. YOU CAN PRESS THE SQUARE KEY AND THE APPROPRIATE LETTER, OR YOU CAN HI-LITE THE APPLICATION FILE IF IT IS IN SUSPENDED ACTIVITIES, THEN PRESS ENTER.
12. CHOOSE PIPEDREAM TO USE AS OUR FIRST EXAMPLE. (REF: ITEM 11)  
PIPEDREAM IS A WORD PROCESSING FUNCTION. IT IS ALSO A BLANK PAGE FOR YOU TO TYPE ON. THE Z-88 AS THE WORLDS FASTEST AND EASIEST TYPEWRITER SEE MANUAL B. IF YOU DO NOT GET A BLANK PAGE; SEE ITEM 15.
13. EACH PRINTER CABLE HAS A NINE PIN END, TO PLUG INTO THE RIGHT SIDE OF THE COMPUTER. THE OTHER END HAS TO MATCH THE PARALLEL OR SERIAL PRINTER YOU ARE USING. (SEE YOUR PRINTER MANUAL). CONNECT BOTH ENDS OF THE RIGHT CABLE. NOT HAVING A PRINTER WON'T STOP YOU FROM USING THE COMPUTER, JUST FROM PRINTING ON PAPER.

14. IF YOU HAVE LOADED PIPEDREAM FROM THE INDEX, THE SCREEN SHOULD BE A BLANK PAGE FOR YOU TO TYPE UPON ... JUST BELOW THE SCREEN IS POSTED A LIST OF COMMANDS YOU MAY APPLY TO THE TYPING TO ALLOW YOU TO DO THINGS NO TYPEWRITER CAN DO. MOST OF THEM ARE OBVIOUS, BUT THE Shift del DELETES THE CHARACTER under THE CURSOR, WHILE THE DEL KEY DELETES THE CHARACTER TO THE LEFT OF THE CURSOR. IF YOU DO NOT GET A BLANK PAGE, YOU HAVE USED ■ P, AND SHOULD BEGIN AGAIN AT ITEM 9.
15. BEGIN TYPING, THE COMPUTER WILL AUTOMATICALLY BEGIN THE NEXT LINE FOR YOU WHEN IT REACHES THE ARROW NEXT TO THE LETTER F.
16. THIS ARROW, DENOTING THE END OF THE LINE, IS MOVABLE LEFT OR RIGHT. SEE LIST BELOW SCREEN, OR P.113, Margins; left, right
17. THE KEYBOARD COMES SET FOR SILENCE, SO IT IS HARD FOR SOME PEOPLE TO KNOW IF A KEY HAS BEEN PRESSED, BUT YOU CAN ADD A KEY-CLICK. PRESS SQUARE AND S, TO REACH PANEL. THE SCREEN WILL SHOW THE PANEL CHOICES THAT CAN BE MODIFIED AND THE MENU, ie, LISTS OF THINGS YOU CAN DO; TO AND WITH EACH APPLICATION. IF YOU WANT THE KEY TO CLICK, MOVE THE CURSOR USING THE ARROWS, TO THE N (FOR NO) NEXT TO Keyclick, THEN PRESS PRESS Y (FOR YES). THIS MODIFICATION OF THE PANEL WILL NOT BE NOTICED BY THE COMPUTER, EVEN IF YOU GO TO FILES IN THE MENU AND SAVE IT WITH A NAME. TO ACTIVATE THIS, OR ANY OTHER PANEL THAT IS ON THE THE SCREEN, YOU MUST PRESS ENTER.
18. THE MENU APPEARS AT THE LEFT OF THE SCREEN, AFTER AN APPLICATION IS CHOSEN, WITHOUT A HI-LITE. PRESSING THE MENU KEY MOVES THE HI-LITE TO YOUR CHOICE. IF YOU ARE WORKING ON A SCREEN, AND GO TO SOME OTHER APPLICATION .. YOUR TEXT IS AUTOMATICALLY SAVED IN TEMPORARY STORAGE, CALLED SUSPENDED ACTIVITIES. IT IS RETRIEVABLE BY MOVING THE HI-LITE TO IT, AND PRESSING ENTER. IF THE SCREEN DOES NOT SHOW THE TEXT, IT WILL SHOW THE OPTIONS SCREEN FOR THAT TEXT. JUST PRESS ESC.
19. IF YOU REACH OPTIONS VIA MENU, THE SCREEN WILL BE BLANK EXCEPT FOR THE ONE HI-LITE LINE. PRESS ENTER TO GET FULL SCREEN. (REF.PP38,118) YOU CAN ALSO GO THERE DIRECTLY FROM ANYWHERE WITH ◆ O.
20. TO SAVE A TEXT TO A MORE PERMANENT PLACE, YOU MUST GIVE IT A NAME BY:  
 ◆ FC .. THEN TYPE NAME AFTER THE SLASH.  
 (RULES FOR ACCEPTABLE NAMES -- SEE PAGES 76 AND 194). THE FILE IS NOW IN THE FILER AND IS RETRIEVABLE BY ◆ FL, AND TYPING THE NAME.
21. ANOTHER WAY TO LOAD A NAMED AND SAVED FILE, THAT ELIMINATES THE CHANCE OF TYPING WRONG, OR MAYBE YOU CAN'T REMEMBER THE NAME; IS::  
 ◆ FL, ■ F, MOVE HI-LITE TO THE FILE NAME, PRESS TAB, ESC, ENTER. AND YOUR FILE WILL BE LOADED. ANY FILE LOADED IS A COPY OF THE ORIGINAL AND CAN BE MODIFIED, OR DESTROYED WITHOUT AFFECTING THE ORIGINAL. IN ORDER TO CHANGE THE ORIGINAL, YOU MUST RE-SAVE IT AFTER THE CHANGES.. HERE AGAIN ARE THE LOADING STEPS IN GRAPHIC FORM....  
  
 ■ P, PRESS MENU-->FILES-->LOAD, ENTER, ■ F, ARROWS-->NAME OF FILE, ENTER-->ESC-->ENTER. THE SAME WOULD HOLD TRUE FOR ■ D.
22. IF YOUR FILE WAS SAVED IN THE FILER ..... AND IS ALSO IN SUSPENDED ACTIVITIES, YOU CAN DESTROY OR ERASE THE FILE IN ONE PLACE, WITHOUT AFFECTING THE OTHER. (REF. KILL P.18; ERASE P.79)
23. THE ONLY APPLICATIONS THAT REACH SUSPENDED ACTIVITIES ARE: PIPEDREAM, BASIC, DIARY, PRINTER EDITOR AND TERMINAL. BASIC IS LOADED AND SAVED, DIFFERENTLY. SEE MANUAL-A PART 5 (P.8)
24. IF YOU HAVE THE PRINTER CONNECTED, AND THE PAPER LOADED, HERE IS HOW TO PRINT. FIRST MENU TO THE OPTIONS SCREEN, PRESS ENTER, OR ◆ O, CHANGE PAGE LENGTH FROM 66 TO 0 ..... THIS WILL SAVE PAPER IF YOU ARE TYPING LESS THAN A FULL PAGE. PRESS ESC TO GET BACK TO THE TEXT. PRESS ◆ PO, (SEQUENTIALLY OR TOGETHER)..IGNORE SCREEN PROMPTS, PRESS ENTER. WHILE PRINTER IS PRINTING THE KEYBOARD IS DEAD EXCEPT FOR THE ESC KEY, WHICH, IF USED, CAN STOP THE PRINTING BEFORE THE END.

25. IF YOU LOAD AN EXISTING FILE FROM PIPEDREAM, IT WILL LOAD, UNKNOWN TO YOU, THE ORIGINAL (DEFAULT) OPTIONS PAGE, OR A MODIFIED OPTIONS PAGE AT THE TIME THE FILE WAS SAVED. YOU CAN MODIFY THE OPTIONS PAGE AGAIN, FOR CURRENT USE, BUT IT WILL RETURN TO ITS LOADED STATE WHEN NEXT LOADED, UNLESS YOU RE-SAVE IT IN ITS LATEST STATE. ALL PIPEDREAM SAVES SAVE THE LATEST OPTION PAGE FOR THAT FILE AUTOMATICALLY.
26. THERE ARE MORE SOPHISTICATED WAYS TO USE PIPEDREAM, BUT THIS MANUAL WILL ONLY ADDRESS THE FIRST LEVEL. SEE ADVANCED MAN. B
27. **TO INSERT AN EPROM CARTRIDGE:**
  - a. FLIP THE SEE-THRU PLASTIC FLAP, (FRONT EDGE OF THE COMPUTER), FROM THE TOP, DOWN -IT IS HINGED AT THE BOTTOM. THE EPROM HAS A SMALL RECTANGULAR OPEN SLOT ON ITS BOTTOM. INSERT THE EPROM ONLY IN SLOT 3 CLOSE THE FLAP, PRESS ◆CARD TO VERIFY ACCEPTANCE BY THE Z-88.
28. TO TAKE A FILE FROM THE FILER, AND SAVE IT ON THE EPROM:
  - a. ■ F, HILITE SAVE TO EPROM, ENTER, TYPE NAME, ENTER, SCREEN WILL DO FUNNY THINGS WHILE SAVING.
29. TO TAKE AN EXISTING FILE FROM EPROM TO THE FILER
  - a. ■ F, HILITE FETCH FROM EPROM, ENTER, TYPE NAME, ENTER, ENTER.
  - b. MORE SOPHISTICATED WAYS ARE DESCRIBED IN MAN. B

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## MANUAL A-PART 1a

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## ◆ SPREADSHEET ◆

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1. THE INSTRUCTIONS FOR USING THE SPREADSHEET ASPECT OF PIPEDREAM, ARE APTLY COVERED IN THE CAMBRIDGE MANUAL, NOW THAT YOU UNDERSTAND MY INSTRUCTIONS IN PART 1. SEE PP.48-56 AND 85-106
2. IT BEHOOVES ONE TO PRACTICE USING THE COMMANDS POSTED BENEATH THE SCREEN BEFORE STARTING THE SPREADSHEET!
3. I WILL UPDATE THIS SECTION IF NECESSARY AS I SEE FIT.
4. FOR MORE SOPHISTICATED AND POWERFUL DEMONSTRATIONS OF THE SPREADSHEET COMMANDS FOR NOT ONLY SPREADSHEETS, BUT FOR PROGRAMMING, SEE MY ADVANCED MANUAL-B, pages 39-->43
5. A SPECIAL ADDENDUM CALLED SLOT COMMANDS IS ADDED AT THE BACK OF MANUAL B.

1. THE DIARY CONSISTS OF ONE PAGE, THE LENGTH OF THE Z-88 MEMORY FREE. IT CAN BE USED OR SEGMENTED INTO AS MANY DATES AS MEMORY ALLOWS.
2. HERE ARE SEVERAL WAYS TO ENTER THE DIARY:
  - A. INDEX-->ARROW-->DIARY, ENTER.
  - B. ■ D
  - C. ■ C, ARROW-->MARKED DATE, ESCAPE (OR ■ D)
  - D. ■ C, ARROW-->LOOK FOR DATE, CHOOSE DATE, ESCAPE (OR ■ D)
3. 2A GIVES A BLANK PAGE TO TYPE ON. 2B, THE SAME. 2C GIVES THAT FILE IF MARKED DATE EXISTS. 2D GIVES THE FILE OF THAT DATE.
4. WHEN YOU ARE DONE WITH AN ENTRY, IF YOU GO ELSEWHERE, THE FILE WILL BE IN SUSP. ACT. UNTIL YOU KILL IT. TO KILL OR ERASE A SUSP. ACT., YOU: ◆ KILL THE HI-LITE. THIS WILL KILL ALL DIARY FILES EXCEPT THE ONES IN FILER.
5. TO GET A FILE INTO THE FILER:: MENU-->FILES, ENTER-->ARROW-->SAVE, ENTER TYPE NAME (SEE LEGAL NAMES P.194), ENTER.
6. TO RETRIEVE FILE FROM FILER, ■ D-->MENU-->FILES-->ARROW-->LOAD-->ENTER-->INDEX-->ARROW-->FILER, ENTER-->ARROW-->FILE NAME, ENTER (TO MAKE MARK), ESCAPE. SCREEN WILL SHOW PAGE FOR THE DATE AT THE RIGHT, NOT NECESSARILY THE DATE YOU LOADED! TO GET YOUR FILE YOU CAN:
  - A. MENU-->BLOCKS-->ARROW-->SEARCH-->TYPE STENCIL. (SEE ITEM 7)
  - B. MENU-->CURSOR-->ARROW-->1st ACTIVE DAY-->NEXT ACTIVE DAY-->ETC...
  - C. ■ C-->ARROW-->MARKED DATES-->ESCAPE.
7. THE SEARCH COMMAND IN DIARY and PIPEDREAM IS OF THE **STENCIL** TYPE. ie, A STENCIL (SEARCH STRING), MADE BY YOU, MUST MATCH EXACTLY WHEN PASSED OVER THE TEXT. A FULL AND COMPLETE WORD IS NOT REQUIRED.

EXAMPLE 1. TO FIND ALL PHONE NOS. BEGINNING WITH 212, JUST LET THE SEARCH STRING = 212. THIS WILL ALSO PICK UP AN ADDRESS LIKE 42127 ELM ST. TO MINIMIZE THIS, THE STENCIL SHOULD'VE BEEN 212 WITH A BLANK SPACE BEFORE AND AFTER IT!! NOW IT WILL PROBABLY ONLY FIND PHONE NOS.

EXAMPLE 2. YOU ARE LOOKING FOR MR. WZYNski OR WZNYSKI OR WYZNISKI. NOT SURE WHICH SPELLING? LOOK FOR SKI AND IT WILL FIND ALL THE WORDS WITH SKI IN THEM. FOR MORE SOPHISTICATED SEARCHES, SEE PP. 44, 58, 91, 144.

8. A MORE SOPHISTICATED USE OF THE DIARY IS FOUND IN MANUAL B. see pages 19 and 20

1. TO REACH THE Printer Ed, (.PED), PRESS INDEX, ARROW TO PrinterEd, PRESS ENTER, OR ... GO DIRECTLY FROM ANYWHERE, WITH **■ E**
2. CAMBRIDGE'S MANUAL . IS OF LITTLE USE IN DESCRIBING HOW TO MODIFY THE PRINTER EDITOR, (.PED); WHICH IS WHAT STARTED ME WRITING THIS MANUAL! FORTUNATELY, MY EXPERIENCE WITH LOGIC AND DEDUCTION, PLUS RIDICULOUS PERSERVERANCE, ALLOWED ME TO FIGURE OUT MOST OF THE ANSWERS. CAMBRIDGE DOESN'T SUPPLY THE RULES FOR US TO GET THE REST ..... THE CAPABILITIES OF THIS MACHINE ARE SO VARIED AND ENORMOUS-THAT NOT EVEN THEIR 200 PAGE MANUAL CAN COVER EVERYTHING.
3. THE PED CONTAINS CONTROL CODE NOS., THAT ARE SENT TO THE PRINTER TO TELL IT WHAT TO DO ... MOST PRINTERS HAVE 256 CHARACTER CELLS, FILLED WITH LETTERS, NOS. AND INSTRUCTIONS ..... CELLS NUMBERED 31-->126 ARE THE SAME FOR MOST PRINTERS. THE FIRST LEVEL EXPLANATIONS NOW FOLLOW:
4. TO CHANGE THE WAY THE TYPED KEYBOARD LETTERS OR SYMBOLS LOOK; TYPE ONE OF THE 8 HI-LITE CODE NOS. AT THE BEGINNING AND END OF THE WORD, SENTENCE OR PARAGRAPH YOU WISH TO MODIFY. SEE MY CODE TABLE BELOW:

KEY INPUT	CODE EXPLANATION	SCREEN CODE NO.
◆ PU	UNDERLINE.....	1
◆ PB	BOLD.....	2
◆ PX	EXTENDED SEQUENCE	3
◆ PI	ITALICS.....	4
◆ PL	SUBSCRIPT.....	5
◆ PR	SUPERSCRIPIT.....	6
◆ PA	ALTERNATIVE FONT.	7
◆ PE	USER DEFINED.....	8

**EXAMPLE:** TO UNDERLINE A WORD, TYPE **◆ PU** BEFORE AND AFTER THE WORD, THIS WILL PLACE THE NUMBER ONE ON THE SCREEN, BEFORE AND AFTER THE WORD, AFFECTING THE APPARENT WIDTH OF THE LINE. MOVING THE CURSOR AWAY FROM THAT LINE, ALLOWS YOU TO SEE HOW YOUR MODIFICATION AFFECTED THE WIDTH.

More codes available in Manual B

5. THEY DON'T TELL YOU, BUT IT IS POSSIBLE AND DESIRABLE TO APPLY MORE THAN ONE CODE NO. BEFORE AND AFTER EACH WORD. MAYBE THEY DON'T KNOW?
6. THERE IS NO INFORMATION ANYWHERE TO EXPLAIN THE **EXTENDED SEQUENCE** -WHAT IT DOES OR HOW TO MODIFY IT, ALSO THE **USER DEFINED**. (SEE P.202). (SEE OUR ADVANCED MANUAL, MAN-B)
7. IF YOU READ YOUR PRINTER MANUAL, THERE ARE CHARACTER CELL NOS.(CHR\$), FROM 0-->255 THAT DO THINGS. IF YOU GO TO **■ E**,-->TO USER DEFINED, THEN CHANGE 120 TO 87 (DOUBLE WIDTH ON MY PRINTER), BOTH PLACES. IT WIL ALLOW DOUBLE WIDTH PRINTING WHEN SURROUNDED BY CODE 8. (**◆ PE**).
8. PAGE 2 OF THE PED, IS REACHABLE BY SHIFT AND DOWN ARROW. IT HAS 9 PLACES TO TRANSLATE A KEYSTROKE TO PRINT ON PAPER SOMETHING THAT LOOKS DIFFERENT THAN THE KEYSTROKE YOU JUST PUT ON THE SCREEN! YOU CAN ALSO CHOOSE A CHR\$ CODE NO. TO INSTITUTE SOME ACTION - LIKE RING A BELL, OR CHANGE THE LINE SPACING ETC.

**EXAMPLE:** THE LEFT SQUARE BRACKET TO THE RIGHT OF THE LETTER P, IS CHR\$ 91 IN THE Z-88. ON PAGE 2 OF THE PED, TYPE UNDER COLUMN B TO CHANGE CHARACTER 91 TO 31. CHR\$ 31 ON MY PRINTER IS THE SYMBOL FOR SPADES. IF I WERE TO TYPE THE LEFT SQUARE BRACKET ON THE SCREEN, IT WOULD PRINT THE SHAPE OF A SPADE ON PAPER.

continued from p.5

PAGE 6

9. HOW DID I KNOW THAT THE LEFT SQUARE BRACKET WAS CHR\$ 91? IF YOU USE BASIC YOU CAN ASK THE COMPUTER TO PRINT CHR\$ X, WHERE X IS ANY NO. YOU CHOOSE. SEE P. 8a OF THIS MANUAL, FOR FURTHER CLARIFICATION. IT SHOWS A SMALL PROGRAM I HAVE WRITTEN THAT PRINTS MOST OF THE CHR\$ SET THAT YOU WILL NEED TO USE OR KNOW.
10. IF THIS PROGRAM IS PUT INTO BASIC AND PRINTED OUT ON PAPER, ITS LOOK WILL DEPEND UPON WHICH PED IS IN FORCE. IF TRANSLATED CHARACTERS HAVE BEEN USED IN MODIFYING YOUR PED FOR YOUR PRINTER, THAT PED MUST BE LOADED AND ACTIVATED, OTHERWISE IT WILL NOT ACCEPT THOSE CHANGES UNTIL THE PED IS ACTIVATED .. (◆ FU)
11. IF YOUR PED IS IN FORCE WHEN THE PROGRAM IS RUN, THE TRANSLATED CHARACTERS ARE PRINTED ON PAPER NOT THE KEYSTROKE CHARACTERS.

SEE MANUAL B FOR MORE INTENSIVE USE  
OF THE PRINTER EDITOR

1. THE PANEL CAN BE REACHED BY THE FOLLOWING PATHS: ((REF.P.81))  
A. INDEX-->ARROWS-->PANEL, ENTER  
B. ■ S

2. THE PANEL ALLOWS YOU TO MODIFY SOME Z-88 FUNCTIONS:

A. AUTO REPEAT RATE	H. PAGE MAP on/off
B. KEYCLICK	J. MAP SIZE--SCREEN SIZE
C. KEYSTROKE ENTRY STYLE	K. DATE FORMAT
D. WHERE DATA GOES...	L. BAUD RATE
E. DEFAULT DIRECTORY	M. PARITY
F. AUTOMATIC SHUT-OFF TIME	N. X on/X off
G. ALARM SOUND	

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ITEMS E, L, M AND N WILL BE DISCUSSED IN MY MANUAL 'B'.

3. ITEMS 2 A, B, F, G, H, J AND K ARE DESCRIBED ADEQUATELY IN THEIR MANUAL.  
ITEMS 2 C AND D ARE DESCRIBED NEXT.....
4. ITEM 2C THE KEYSTROKE ENTERS THE SCREEN 2 WAYS: INSERT OR OVERTYPE.  
IF YOU ARE AT THE PANEL SCREEN, MOVE THE CURSOR UNTIL IT IS AT THE INSERT/OVERTYPE LINE, THEN TYPE I or O ..... ONCE YOU HAVE CHOSEN YOUR STYLE, AND WISH NO OTHER MODIFICATIONS, YOU MAY NAME AND SAVE THIS FILE, OR JUST PRESS ENTER TO ACTIVATE THE CHANGE. IF YOU JUST SAVE THE FILE, IT WILL NOT BE ACTIVATED UNLESS YOU LOAD THEN ENTER THE NAMED FILE.
5. IF ONE OF THE FOLLOWING WERE ON THE SCREEN BEFORE CHANGING THE I/O; (PIPEDREAM, BASIC OR DIARY), THAT APPLICATION WILL KEEP THE I/O IT WAS LOADED WITH, FROM THE OLD ACTIVATED PANEL UNTIL IT IS RELOADED WITH THE NEW PANEL IN FORCE. IT IS POSSIBLE TO FILE MANY DIFFERENT PANELS.
6. THE I/O CHOICE IS VISIBLE ON THE PANEL AND THE OPTIONS SCREEN OF PIPEDREAM AND IN THE LOWER RIGHT CORNER OF THE DIARY. IT IS **ALWAYS** CHANGEABLE AT ANY TIME FROM THE KEYBOARD WITH ◆ V.
7. ITEM 2D
  - a. ALL FILES YOU CREATE AND SAVE, WILL AUTOMATICALLY BE SAVED TO :RAM.0 .. (INSIDE THE COMPUTER/ONLY 32K), UNLESS YOU TELL THE COMPUTER TO SAVE IT SOMEWHERE ELSE. USUALLY, YOU HAVE A BIGGER MEMORY CARD IN :RAM.1, AND MUST CHANGE :RAM.0 TO :RAM.1 IN TWO PLACES; THE PANEL AND THE FILER
  - b. IN THE PANEL, CHANGE Default device .. & IN THE FILER, GO TO SELECT DEVICE TO CHANGE ZERO'S TO 1'S.
  - c. AGAIN, THE PANEL MODIFICATIONS **MUST** BE ACTIVATED TO BE USED BY THE COMPUTER.
8. SEE PAGE 21 MANUAL B

**1. BASIC CAN BE REACHED BY THE FOLLOWING PATHS:**

**A. INDEX-->ARROWS-->BASIC, ENTER**

**B. ■ B**

((REF. P.155))

**C. TO LOAD AN EXISTING BASIC FILE, YOU TYPE LOAD AND THEN THE NAME BETWEEN QUOTES EXAMPLE: LOAD "THIS-FILE.BAS"**

**TO SAVE A BASIC FILE, YOU MUST GIVE IT A NAME BETWEEN QUOTES AND TYPE .. SAVE "THIS-FILE.BAS" (SEE ITEM 5)**

**2. WHEN YOU ARE IN BASIC YOU CAN TELL THE COMPUTER TO DO ANYTHING YOU WANT IT TO DO! TO DO THIS AT THE LOWEST LEVEL, YOU JUST NEED TO LEARN A FEW TRICKS; TO WIT --**

**3. IF YOU TYPE A LINE NO. BEFORE GIVING THE COMPUTER A COMMAND, IT WILL STORE THAT DATA AND ALLOW IT TO BE USED AGAIN. IF YOU LEAVE OFF THE LINE NO., THE COMPUTER WILL EXECUTE YOUR COMMANDS (WHEN TOLD), BUT WILL NOT KNOW OR REMEMBER THAT IT DID IT, OR BE ABLE TO RECALL IT. IF THE COMMANDS HAVE LINE NOS., IT IS CALLED A PROGRAM. IF NOT, THEY ARE CALLED DIRECT OR IMMEDIATE COMMANDS.**

**EXAMPLE 1: > PRINT "HI, COMPUTERS ARE GREAT!!" IF THE UNDERLINED STUFF IS TYPED ON THE BASIC SCREEN, AND ENTER IS PRESSED, THE SCREEN WILL DISPLAY WHATEVER WAS TYPED BETWEEN THE QUOTES. TO DO THIS AGAIN, YOU HAVE TO START ALL OVER-- THIS IS A DIRECT COMMAND.**

**EXAMPLE 2: > 10 PRINT "HI, COMPUTERS ARE GREAT!!" IF THE UNDERLINED STUFF IS TYPED ON THE BASIC SCREEN, AND ENTER IS PRESSED, THE NEW LINE CAN NOW ACCEPT THE NEXT LINE NO. OR A DIRECT COMMAND. IF THE COMMAND IS RUN, THEN ENTER, THE SCREEN WILL BE IDENTICAL TO EXAMPLE 1, BUT TO REPEAT, YOU NEED ONLY TO RUN AGAIN. THIS IS A PROGRAM.**

- 4. IF YOU GIVE MANY LINE NUMBERED COMMANDS IN THE RIGHT ORDER, YOU CAN MAKE A NICE PROGRAM TO DO WONDERFUL THINGS. SEE PROGRAM PAGE 8a TO HAVE THIS PRINT ON PAPER, Type RUN AND BEFORE PRESSING ENTER, Type ■+P .. WHEN DONE, PRESS ■-P TO REMOVE THE CLI SHOWING IN THE UPPER RIGHT CORNER OF THE SCREEN. IF YOU FORGET, EVENTUALLY THE Z88 WILL ACT FUNNY AND FAIL!**
- 5. BASIC PROGRAMS MUST BE NAMED AND SAVED IN ORDER TO BE RECALLED. MOST CHARACTERS IN BASIC MUST BE CAPITALS .. EXCEPT FOR TITLES AND THINGS IN QUOTES. ALL BASIC NAMES MUST BE IN QUOTES WHEN LOADING OR SAVING!**
- 6. THE REAL ADVANTAGE OF BASIC, IS THAT YOU CAN MAKE IT DO ALL KINDS OF COMPLICATED MATHEMATICAL THINGS THE CALCULATOR CANNOT DO, PLUS YOU CAN CREATE A SEQUENCE OF MANY COMMANDS TO ACCOMPLISH RESULTS AND TASKS THAT YOU COULD ONLY DREAM OF!!!**
- 7. MORE ADVANCED BASIC IN MANUAL B, BEGINNING ON PAGE 6**
- 8. SEE PROGRAM ON P.8a, THIS MANUAL**
- 9. BOOKS ON BASIC AVAILABLE FROM DOMINO CUBES**
  - A. BBC BASIC by R.B.COATS**
  - B. BBC BASIC REFERENCE MANUAL M-TEC** *SEE P. 8 MAN.B*
  - C. PROGRAMS IN BBC BASIC FOR YOUNG MATHEMATICIANS by BREWER**
  - D. LIST OF COMMANDS AND FUNCTIONS ONLY - DOMINO CUBES**
  - E.**
- 10. WHILE CREATING AND DEBUGGING A BASIC PROGRAM, YOU TEST, RUN, REDO, RE-RUN, REWRITE, MAKE CHANGES. WHEN YOU ARE FINALLY DONE, (YOU THINK), YOU SAVE YOUR FILE UNAWARE THAT THE LAST CHANGES YOU MADE WERE NOT SAVED UNLESS YOU RAN THE PROGRAM AFTER MAKING THE CHANGES!! THIS INFO COURTESY OF MIKE FINK ..... NO OTHER BOOK OR PERSON EVER MENTIONED THIS....**

31 =	32 =	33 = !	34 = "	35 = #
36 = \$	37 = %	38 = &	39 = '	40 = (
41 = )	42 = *	43 = +	44 = ,	45 = -
46 = .	47 = /	48 = 0	49 = 1	50 = 2
51 = 3	52 = 4	53 = 5	54 = 6	55 = 7
56 = 8	57 = 9	58 = :	59 = ;	60 = <
61 = -	62 = >	63 = ?	64 = @	65 = A
66 = B	67 = C	68 = D	69 = E	70 = F
71 = G	72 = H	73 = I	74 = J	75 = K
76 = L	77 = M	78 = N	79 = O	80 = P
81 = Q	82 = R	83 = S	84 = T	85 = U
86 = V	87 = W	88 = X	89 = Y	90 = Z
91 = [	92 = \	93 = ]	94 = ^	95 = _
96 = `	97 = a	98 = b	99 = c	100 = d
101 = e	102 = f	103 = g	104 = h	105 = i
106 = j	107 = k	108 = l	109 = m	110 = n
111 = o	112 = p	113 = q	114 = r	115 = s
116 = t	117 = u	118 = v	119 = w	120 = x
121 = y	122 = z	123 = {	124 =	125 = }
126 = ~	160 = á	163 =		

```

200 *NAME Z88-CHR-SET.BAS
220 AA$="Z88-CHR-SET.BAS"
240 REM (C)1988 MIKE FINK - DOMINO CUBES (BASIC-1 & MISC-1)
260 PRINT"CHOOSE S= 65=COND; 66=BOLD; 69=DOUBLE WIDTH; 73=ITALICS;
      88=EXT.SEQ.; 76=SUBSCRIPT; 82=SUPERSCRIPT"
280 INPUT"                               INPUT S = "; S
300 P=OPENOUT":PRT.0"
320 PRINT#P,CHR$(5)+CHR$(91)
340 PRINT#P,CHR$(5)+CHR$(S)
360 WIDTH70
380 FOR X=31 TO 126
400   PRINT X;" = ";CHR$X;
420 NEXT
440 FOR Y=160 TO 163 STEP3
460   PRINT Y;" = ";CHR$Y;
480 NEXT
500 PRINT#P,CHR$(5)+CHR$(S)
520 PRINT#P,CHR$(5)+CHR$(93)
540 END

```

IT IS POSSIBLE TO PUT A PRINT COMMAND IN THE BASIC PROGRAM TO TELL THE COMPUTER TO PRINT TO THE PRINTER WITHOUT YOU HAVING TO BE THERE TO TYPE THE SQUARE + P CLI COMMAND. SEE ADVANCED MANUAL B. ALSO SEE PAGES 7 AND 8A IN MAN. B

1. THE CALENDAR IS ONE OF THE "POPDOWNS". IT IS REACHABLE BY THE FOLLOWING PATHS; (REF: PAGES 59,61 & 68 CAMBRIDGE)

A. INDEX -->ARROWS -->CALENDAR, ENTER  
 B. ■ C

2. THE CURSOR KEYS, (ARROWS), ALONE, OR IN COMBINATION WITH THE SHIFT, ◆ AND ■ KEYS, ARE USED TO MOVE ABOUT IN THE CALENDAR .. TO WIT:

LEFT ARO	= PREVIOUS DAY	RIGHT ARO	= NEXT DAY
UP ARO	= PREVIOUS WEEK	DOWN ARO	= NEXT WEEK
SHIFT/UP ARO	= PREVIOUS MONTH	SHIFT/DOWN ARO	= NEXT MONTH
◆ UP ARO	= PREVIOUS YEAR	◆ DOWN ARO	= NEXT YEAR
■ LEFT ARO	= PREVIOUS ACTIVE DAY	■ RIGHT ARO	= NEXT ACTIVE DAY

3. IF THE CALENDAR IS CALLED BY (■C), (WHILE IN THE DIARY) .. ALL DIARY DATES WITH DATA, WILL SHOW A LITTLE ARROW, (CARAT), NEXT TO THAT DATE AND CAN BE CALLED TO THE SCREEN BY ESCAPE, OR ■ D. OTHER ACTIVE DAYS ARE EASILY REACHED WITH ARROWS OR CURSOR MENU COMMANDS FROM DIARY.
4. MORE SOPHISTICATED USE OF THE CALENDAR IS DESCRIBED IN MANUAL B

1. THE ALARM CAN BE REACHED BY THE FOLLOWING WAYS: (SEE PAGES 16, 72)

A. INDEX -->ARROWS -->ALARM, ENTER  
 B. ■ A

2. THE ALARM CAN BE SET TO MAKE A NOISE, OR EXECUTE (RUN), A FILE, OR TYPE A SERIES OF PREVIOUSLY RECORDED KEY STROKES, AT ANY FUTURE TIME YOU CHOOSE, AND AS MANY TIMES AS YOU DESIRE. THERE MUST BE A TIME GAP BETWEEN SUCCESSIVE ALARMS, DEPENDING UPON HOW LONG EACH EXECUTION TAKES.
3. **NOBODY** HAS A MANUAL TO TELL YOU HOW TO ACCOMPLISH THIS, EXCEPT DOMINO CUBES .... (MANUAL B, SPECIAL PAGES). THE ALARM IS NOT A SINGLE BEEP, BUT A 7 BEEP SOUND, LASTING ABOUT 7 SECONDS. IT WOULD BE IMPOSSIBLE FOR YOU TO SET YOUR ALARM SETTINGS PROPERLY, FOR GAP, FREQUENCY AND TIMING IF YOU DIDN'T UNDERSTAND THIS.
4. THE REST OF THE ALARM INSTRUCTIONS ARE ADEQUATE, EXCEPT FOR THE FIELD (AREA), CALLED REASON/COMMAND. EXPLAINED IN MANUAL B.

MOST OF THE Z88 SCREENS ARE SHOWN BELOW. EACH PRESS OF ESCAPE WILL TAKE YOU BACK TO THE SCREEN OR SCREENS YOU WENT THRU TO GET WHERE YOU ARE .. ESCAPE FROM THE PRINTER EDITOR, DOES NOT WORK. YOU MUST CHOOSE THE NEXT SCREEN YOU WISH.

PIPEDREAM SQ. P	OPTIONS PAGE P	SEARCH or REPLACE P	LOAD, SAVE or NAME P	REPLICATE P	P
DIARY SQ. D	LOAD or SAVE D	LIST/ PRINT D	SEARCH or REPLACE D	D	D
FILER SQ. F	CATALOG FILES F	CATALOG EPROM F	SAVE TO EPROM F	FETCH FROM EPROM F	COPY- RENAME- ERASE- F
	SELECT DEVICE F	SELECT DIRECTORY- F	EXECUTE- CREATE DIRECTORY- F	NAME MATCH F	TREE COPY F
POPDOWNS->	CALENDAR SQ. C IMP/EXP SQ. X	CLOCK SQ. T CALCULATOR SQ. R	ALARM SQ. A	FILER SQ. F	PANEL SQ. S
TERMINAL VT52 or VT-100 V	PRINTER EDITOR---> SQ. E E	>-->LOAD >-->SAVE >-->NAME E	PC-LINK and other ROMS SQ. ZL ZL	INDEX SQ. I CARD VIEWER ♦ CARD I	
RAM.0 Z88 32K	RAM.1 SLOT 1 RAM	RAM.2 SLOT 2 RAM/ROM	RAM.3 SLOT 3 EPROM	RAM.- GHOST (UNUSED)	

EXAMPLES: FROM A PIPEDREAM SCREEN: 1. ■F THEN 2. ♦CE OR DOWN ARO  
3. YOU ARE NOW IN CATALOG EPROM SCREEN  
FIRST ESC --> TO FILER CATALOG EPROM SCREEN  
SECOND ESC --> BACK TO ORIGINAL CURSOR POSITION IN ORIGINAL FILE

■ DOMINO CUBES      PHONE 212-631-7563      ■  
■ 352 7th AV 15th FL.      FAX=947-5069      ■  
■ ♠ ♥ NEW YORK CITY 10001      ♠ ♦      ■  
■ VOICE MAIL PAGER 917-490-8407      ■  
■ E-MAIL = mike.fink@circellar.com      ■

CARRYING CASE B, IS ONE I DESIGNED MYSELF. IT IS LIGHT, STRONG  
AND WATER REPELLENT, AND SHOCK-PROOF. IT HAS ROOM FOR;

- |                             |                                    |
|-----------------------------|------------------------------------|
| 1. 1- Z-88                  | 2. BUBL-JET PORTABLE 4 LB.PRINTER  |
| 3. A/C ADAPTER Z-88         | 4. A/C ADAPTER-BUBL-JET            |
| 5. DISK-DRIVE CABLE         | 6. 3-WAY OUTLET                    |
| 7. 1-PARALLEL CABLES        | 8. EXTENSION CORD                  |
| 9. 1-SERIAL CABLE           | 10. PORTABLE DISK-DRIVE            |
| 11. IBM or MAC-LINK PACKAGE | 12. 12-CARTRIDGES (RAMS OR EPROMS) |
| 13. A/C ADAPTER (CAR)       | 14. PAPER - 100 SHEETS             |
| 15. 16 EXTRA AA BATTERIES   | 16. 2 EXTRA BUBL-JET CARTRIDGES    |
| 17. 20 DISKS 3-1/2"         | 18. (INTERNAL FOAM WHERE NEEDED)   |

ALL THIS FITS INTO THE CASE, WHICH WEIGHS ONLY 4 POUNDS, AND IS  
LOCKABLE, AND FITS UNDER A PLANE SEAT OR BUS SEAT.

THE PRICE IS \$160, LOCK IS INCLUDED FREE.....

MIKE FINK

CUT PLEDGE ALONG DASHED LINE AFTER SIGNING, AND THEN MAIL WITH  
APPROPRIATE MONEY IF REQUIRED.

=====

ALL PEOPLE THAT RECEIVE THE MIRACLE OF "REMOTE CONTROL", AN  
ARRANGEMENT OF COMMANDS, UNKNOWN TO ALL OTHERS, THAT ALLOWS YOU TO  
MAKE MULTIPLE COPIES OF MULTIPLE APPLICATIONS, IN ANY ORDER OR ANY  
QUANTITY, AND DOES THIS FOR YOU WHILE YOU ARE AWAY OR ASLEEP, MUST  
SIGN THIS PLEDGE, TO NOT DIVULGE THIS INFORMATION OR KNOWLEDGE TO  
OTHERS. THIS ABILITY IS INTENDED FOR DOMINO CUBES Z88 CUSTOMERS, FOR  
THEIR PLEASURE, USE AND AMAZEMENT, REGARDLESS OF THEIR GETTING IT  
FREE, OR PAYING FOR IT.

DESIGNED, DISCOVERED AND INVENTED BY MIKE FINK (TAKES A FEW SECONDS)

NAME: .....PHONE.....FAX.....  
ADDRESS.....

SIGNATURE.....DATE.....

## **ALARM**

BEFORE WE START ON THE ALARM, LET ME GIVE YOU THE CURRENT INDEX OF WHAT'S IN STORE, IT IS CONSTANTLY ADDED TO AND UPDATED. WHEN WE FEEL THAT THERE IS NO MORE TO LEARN ABOUT THE Z88, WE WILL PRINT A PROFESSIONALLY BOUND NORMAL BOOK TYPE MANUAL.....

<u>ALARM</u> .PAGES 3 & 4 ORDERED SEPARATELY.....	PAGES 1 THRU 5
<u>BASIC</u> A, B, MORE ON THE WAY.....	PAGES 6 THRU 8
<u>DISK-DR</u> INCOMPLETE DATA.....	PAGES 9 THRU 9
<u>FILER</u> .4 PAGES SO FAR AND GROWING.....	PAGES 10 THRU 14
<u>IMP-EXP</u> .....	PAGES 15 THRU 15
<u>MISC.</u> .FORMATTING AND DIARY & GRAPHICS ..	PAGES 16 THRU 20
<u>PANEL</u> .SEE MAN-A ALSO.....	PAGES 21 THRU 21
<u>PIPEDREAM</u> A-B-C-D.MORE COMING.....	PAGES 22 THRU 26
<u>PRINTER ED.</u> SEE PED-CODES .....	PAGES 27 THRU 38
<u>SPREADSHEETS</u> ..5 pages so far.....	PAGES 39 THRU 43
<u>TERMINAL</u> .TERMINAL, BULLETIN BOARDS, ETC;..	PAGES 44 THRU 50

IF YOU BEGIN WITH ALARM, FIRST READ PAGES 72,73 IN THE CAMBRIDGE MANUAL. I WILL THEN DISCUSS THEIR ERRORS, OMISSIONS AND ALL OTHER PERTINENT KNOWLEDGE AVAILABLE. THEY MADE AN ERROR ON P.73.... DATE:3 MAY 1987 SHOULD BE MAR. ..... OTHER OMISSIONS NOTED ON P.2 CAMBRIDGES' MANUAL DOES NOT TELL YOU THAT THE ALARM IS NOT A SINGLE BEEP, BUT A 7 BEEP SOUND LASTING ABOUT 7 SECONDS. IT WOULD BE IMPOSSIBLE TO SET YOUR ALARMS FOR GAP AND FREQUENCY, IF I DIDN'T TELL YOU THIS!! (IF YOU WERE USING GAPS LESS THAN 7 SECONDS.)

IF YOU GO TO ALARM FROM DIARY, IT WILL SHOW THAT DIARY DATE.

IF YOU GO TO ALARM FROM CALENDAR, IT WILL SHOW THAT DATE.  
IF THE BELL IS ON, YOU GET SEVEN BEEPS EACH TIME THE ALARM TIME IS REACHED. YOU CANNOT CHANGE AN ALARM ALREADY SET, BUT YOU CAN VIEW IT OR CLEAR, (DELETE) IT. YOU MUST EXIT FROM ALARM TO LET THE Z88 USE IT. (SEE SPECIAL PAGES 3 AND 4.)

## **ALARM**

ONE OF THE MOST POWERFUL FEATURES OF THE Z88, IS ITS ABILITY TO DO THINGS FOR YOU WHILE YOU ARE NOT AROUND. THE COMMANDS TO GIVE TO THE COMPUTER ARE NOT HARD TO UNDERSTAND, ANYONE CAN USE THEM. YOU CAN LOOK AT THE Z AS A TAPE RECORDER PLAYING BACK MUSIC YOU EARLIER RECORDED, BUT INSTEAD OF RECORDING NOTES, YOU RECORD KEYSTROKES, WORDS, AND/OR COMMANDS TO BE EXECUTED AT YOUR WHIM! YOUR PRESENCE IS NOT REQUIRED IF YOU USE THE ALARM. THE SPECIALLY ORDERED PAGES EXPLAIN HOW TO DO THIS. IT REQUIRES SIGNING THE ENCLOSED PLEDGE AND MAILING IT TO DOMINO CUBES.

THE FILE CALLED REM-CNTRL-1.PD, BELONGS AS PAGE 3, BUT CANNOT BE IN THIS LIST FILE, BECAUSE IT REQUIRES A DIFFERENT PRINTER EDITOR THAN THAT USED IN THE REST OF THE LIST FILE. REM-CNTRL-2.PD USES THE SAME .PED AS THE LIST FILE, AND IS PAGE 4. PAGES 3 & 4 WILL BE PRINTED SEPARATELY, AND ONLY INSERTED WHEN THE CUSTOMER HAS SIGNED THE PLEDGE .... TO NOT DIVULGE THE SECRETS OF THOSE PAGES!!!!

**MISSING FROM CAMBRIDGES' MANUAL IS..**  
**HOW TO -----> ....**

1. Make double width characters
2. Make all 7 different width characters
3. Call all files (or any!) from eproms to the filer
4. Make the left apostrophe
5. Modify the printer editor
6. Make multiple copies EASILY
7. Make multiple copies of multiple applications EASILY
8. Formatting in depth
9. Mail-merge on the Z88; NOBODY but Domino Cubes can do this!!
10. Use all of the spreadsheet commands; with sophistication
11. Make custom programs, quickly by ordinary intelligent people
12. COPY, ◆CO, a filer command, does not work as explained; see P. 13
13. Use extended sequence, and user defined in the printer editor
14. Name and save basic programs to be visible in suspended activities
15. Explain how many program line numbers are available in basic
16. Print out from basic, and in different widths
17. Use LIST files (SEE PAGE 24)
18. Edit BASIC program from PIPEDREAM
19. Edit BASIC programs while in BASIC

**ALL OF THESE THINGS ARE EXPLAINED BY MIKE FINK'S MANUALS !\*!\*!**

A SEPARATE PIECE OF PAPER CALLED THE "PLEDGE" COMES WITH THIS MANUAL.  
 SIGN THE HALF THAT GETS RETURNED TO DOMINO CUBES TO RECEIVE THE SPECIAL  
 REMOTE CONTROL MACRO INSTRUCTIONS PAGES 3 AND 4 ...

## REMOTE CONTROL-MAGIC ROBOT and... MULTIPLE COPIES!

IT IS POSSIBLE TO PRINT AND **COLLATE!** FILES IF THE PRINTING AND LOADING TIME FOR EACH DOCUMENT IS KNOWN FOR THE PRINTER AND PRINTER EDITOR IN USE, AND THE ALARM INTERNALS ARE PROPERLY CHOSEN! .... IT IS ALSO POSSIBLE TO RECALL FILES FROM ALMOST ALL APPLICATIONS AND COMMAND THEM TO DO MANY DIFFERENT THINGS. PRIMARILY THOSE FROM PIPEDREAM, DIARY AND BASIC. THE EASIEST WAY IS TO TELL THE ALARM APPLICATION WHICH FILE YOU WISH TO RECALL, WHEN, AND WHAT FURTHER ACTION TO IMPOSE UPON IT. IE;

1. TO PRINT MANY COPIES, RING A BELL ETC.
2. INVOKE A CLI WITH YOUR COMMANDS INSIDE THE CLI, TO REACH OTHER FILES OR AREAS.

THE FOLLOWING LIST SHOWS MOST OF THE SYMBOLS TO USE WHEN INSERTING COMMANDS IN AN ALARM OR IN A CLI.

= DIAMOND	~E = ENTER	MADE <u>EASY</u> BY: MIKE FINK (C) MAR 1989
# = SQUARE	~S = SHIFT	
[ = ESCAPE	~L = LEFT	
#P = PIPEDREAM	~R = RIGHT	
#D = DIARY	~U = UP	
#B = BASIC	~D = DOWN	* REQUIRES 3 TO PRINT 2!
~H = HELP	~I = INDEX	
@@ = @ *	~M = MENU	
## = #	~X = DELETE	
=	~T = TAB	

\*CLI.Dnnn=DELAY OF nnn/100 SECONDS ----> SEE P.45 OF THE DEVELOPERS' NOTES

THE EXAMPLES BELOW, SHOW HOW TO ENTER THE REASON/COMMAND AREA IN ALARM TO ALLOW UNATTENDED, TIMED, REMOTE LOADING AND PRINTING OF A FILE, WITH CHOICE OF THE NUMBER OF COPIES, OR CYCLES, AND THE INTERVAL BETWEEN ACTION, WHICH MUST BE MINIMUM OF THE TIME TO PRINT, **PLUS** THE TIME TO LOAD. ... YOU HAVE ONLY 22 SPACES TO WRITE YOUR COMMANDS IN THE REASON/COMMAND SLOT.

WHEN THE COMMANDS REQUIRE MORE THAN 22 SPACES, IT IS BEST TO NAME A .CLI IN THE REASON/COMMAND SPACE, AND PUT AS MANY COMMANDS IN THE .CLI AS YOU REQUIRE. SEE EXAMPLE 2; YOU CAN INVOKE ACTION FROM AND TO; BASIC, DIARY, PIPEDREAM, TERMINAL, PRINTER EDITOR, PANEL, FILER, CALENDAR, ALARM, CLOCK, AND IMPORT-EXPORT.

EX.1 #P|FL FILE NAME ~E|PO~E FOR PRINTING PIPEDREAM  
EX.2 #F|EX FILE NAME.CLI ~E FOR INVOKING EXTERNAL CLI'S  
EX.3 #D|FL FILE NAME ~E|BLN~DY~E FOR PRINTING DIARY  
EX.4 #BRUN" FILE NAME "##+P~E FOR PRINTING BASIC \*\*  
EX.5 #BRUN ##+P~E FOR PRINTING BASIC \*\*\*

\*\* IF ALARM IS SET FOR MORE THAN ONE PROGRAM, USE FILE NAME.  
\*\*\* IF ALARM IS SET FOR ONE PROGRAM, IF IT IS THE FIRST PROGRAM IN THE FILER, THEN THE FILE NAME CAN BE OMITTED.

IT SHOULD TAKE ONLY 30-40 SECONDS TO ENTER YOUR COMMANDS IN ALARM.

MAKE EXTRA COPIES OF THE FILES YOU WISH TO CONTROL, AND CHANGE THEIR NAMES TO A SINGLE LETTER BEFORE ARMING THE ALARM.

(C) MAR 1989, 1994  
BY MIKE FINK

P. 4

HERE ARE SOME EXAMPLES OF HOW TO USE 'REMOTE CONTROL': BY MIKE FINK

1. SIMPLE MULTIPLE COPIES OF ONE FILE IN PIPEDREAM
2. SIMPLE MULTIPLE, COLLATED COPIES OF TWO FILES IN PIPEDREAM

- =====
1. LET'S SAY YOU HAVE A LETTER SAVED IN THE FILER UNDER THE NAME JOHN BROWN, AND THE COMBINATION OF PRINTER EDITOR COMMANDS AND THE PRINTER YOU ARE USING, TAKES 48 SECONDS TO PRINT ON PAPER, AND 4 SECONDS TO LOAD FROM THE FILER. YOU WISH TO MAKE MULTIPLE COPIES OF THIS FILE WITHOUT YOUR ATTENTION OR TIME BEING SPENT. FIRST YOU CLEAR, (KILL) ALL SUSPENDED ACTIVITIES, THEN, USING THE FILER, (◆F) YOU RENAME YOUR FILE, (◆RE), TO A ONE OR TWO LETTER NAME ..JB ? NOW GO TO THE ALARM, (■ A), AND YOU WILL SEE THE FOLLOWING SCREEN:

=====

DATE	TIME	REASON COMMAND
EXIT SET ALARM CLEAR ALARM VIEW ALARM		

=====

MOVE THE CURSOR TO SET ALARM, PRESS ENTER, AND YOU WILL SEE:

=====

DATE	TIME	REASON COMMAND
08/07/1990	10:23:45	

=====

BELL	ALARM TYPE	REPEAT EVERY	NO. OF TIMES
ON	ALARM	NEVER	NEVER

=====

CHANGE TIME TO SIMPLE NOS. LIKE 10:27:00, IT'S A GOOD IDEA TO GIVE YOURSELF 2-3 MINUTES FOR ENTERING YOUR DATA, AND CHECKING THE PRINTER ETC., THEN, UNDER REASON COMMAND ENTER #P:FLJB~E!PO~E NOW CHANGE ALARM TYPE TO EXECUTE WITH THE UP OR DOWN ARROWS, REPEAT EVERY 52 SECONDS....CHOOSE NO. OF TIMES. IF YOU CHOOSE 52 SECONDS, THE PAPER WILL NEVER STOP MOVING. IT MIGHT BE WISE TO INCREASE THE 52 SEC'S TO ONE MINUTE TO ALLOW YOU TIME FOR PAPER ADJUSTMENT.

=====

DATE	TIME	REASON COMMAND
08/07/1990	10:27:00	#P:FLJB~E!PO~E

=====

BELL	ALARM TYPE	REPEAT EVERY	NO. OF TIMES
OFF	EXECUTE	1 MIN	56

=====

PRESS ENTER, AND DO NOT LEAVE THE SCREEN IN ALARM; NOTHING WILL HAPPEN. YOU MUST EXIT FROM ALARM, EVEN TURNING THE Z-88 OFF IS OK. THE BEST CHOICE IS ■ T ....., THE CLOCK SCREEN WILL STAY ON UNTIL THE CLI EXECUTES, THEN IT WILL MAKE 56 COPIES OF THE FIRST COPY, OR 57 COPIES.

this file is the same as ALARM.PD P.3

P. 4

1. RE-READ P.8 & 8A ETC; IN MAN.A BEFORE CONTINUING HERE.
2. OPEN CAMBRIDGE MANUAL TO SECTION 7 .. READ AND UNDERSTAND INVERTED CAPS.
3. **SKIM** THRU; COMMANDS, STATEMENTS, FUNCTIONS & OPERATORS  
READ AND UNDERSTAND ARITHMETIC OPERATORS!! SEE OPERATORS SHOWN  
IN PIPEDREAM **HELP** MENU. (VERSION 3.0 ONLY)

---

THE BEST WAY TO LEARN PROGRAMMING, IS TO DO IT, MAKE ERRORS, LOOK AT OTHER PROGRAMS, LEARN BY TRIAL AND ERROR, READ A LITTLE, MAKE A PROGRAM, FIND THE ERRORS, REPEAT. THIS IS A BETTER, QUICKER WAY TO LEARN PROGRAMMING THAN BY JUST READING A BOOK!!    MIKE FINK

---

MOST OF MY MANUALS CONTAIN INFO YOU REALLY NEED, THAT IS NOT FOUND ANYWHERE ELSE, BECAUSE THEY HAVE OMITTED IT, OR DIDN'T KNOW IT EXISTED. (FOR EXAMPLE-SEE PAGES 3 & 4 MAN.B)

## BASIC-A

1. INPUT REQ'S NO.'S AS KEYSTROKES NOT FORMULAE NOR OPERATIONS IE:  
7/2, 6^7, SQ5, 3-8, SIN PI, ETC. ALL NOT ACCEPTED BY Z-88.
2. EXPLANATION OF MULTIPLE IF-THEN-ELSE \*REQUIRES OATH!!
3. NO GOSUB ALLOWED FROM INSIDE IF-THEN.

=====

EDITING WITH PIPEDREAM: from basic-->pipedream-->basic

1. WRITE PROGRAM IN BASIC
2. ESC, LIST SQ+S, ENT, WAIT, SQ-S
3. FILER, DEVICE= :RAM.- SEE: S.sgn
4. SQ.P, LOAD: :RAM.-/S.sgn as PLAIN TEXT
5. ERASE BOTTOM LINE GARBAGE
6. CREATE SPACE FOR SLOT A1,2,3 ENTER ■B .J NEW AS SHOWN BELOW

■B

.J SEE P.201 CAMBRIDGE MANUAL  
NEW

7. EDIT, USING POWERFUL PIPEDREAMS COMMANDS
8. SAVE AS PLAIN TEXT
9. ■ F, SHOULD SEE FILE IN device RAM.- MARK FILE, EXECUTE
10. RUN, ESC, SAVE BY YOUR FILE NAME, IN ORIGINAL DEVICE (:RAM.1)
11. GOTO :RAM.-, ERASE S.sgn (SEE P.13 MAN.B S-SGN.CLI)
12. RETURN TO ORIG. DEVICE DONE

EDITING WITH PIPEDREAM: from pipedream -->basic

1. WRITE PROGRAM IN PIPEDREAM
2. CREATE SPACE FOR SLOT A1,2,3

■B

.J SEE P.201 CAMBRIDGE MANUAL  
NEW SEE P.2-5 M-TEC

3. SAVE :RAM.-/S.sgn AS PLAIN TEXT
4. ■ F, DEVICE :RAM.-, MARK FILE, EXECUTE
5. RUN, ESC, SAVE BY YOUR FILE NAME, IN ORIGINAL DEVICE (:RAM.1)
6. GOTO :RAM.-, ERASE S.sgn
7. RETURN TO ORIG. DEVICE DONE

=====

EDITING IN BASIC:

1. CHAIN "PATCH.BAS" ALLOWS EDITING, (AND MORE) WHILE IN BASIC
2. WRITE YOUR PROGRAM
3. TO EDIT A LINE NO.; ESC, \*EDIT345 (345= LINE NO.) WAIT.....
4. CURSOR APPEARS AT THE END OF THE LINE  
(EDIT CAN BE ABBREVIATED TO E.)

SEE P.8a (BASIC-B), FOR ANOTHER EDITING PROGRAM EASIER TO USE

WHEN YOU PRINT FROM THE FILER, OR BASIC, WITH ■+P, THE FIRST LETTER APPEARS WITH A LEFT MARGIN = 0. YOU CAN CHANGE THE LEFT MARGIN IF YOUR PRINTER HAS SUCH A COMMAND, MOST DOT-MATRIX AND INK-JET PRINTERS DO. GO TO THE PRINTER EDITOR, AT EXTENDED SEQ. USE 27,"1",n & 27,"1",0 .. "1" = LOWER CASE L = ASCII 108  
or USE 27,108,n & 27,108,0 .. ACTIVATE PED. THEN SEND THIS PED. TO THE PRINTER BY PRINTING ANYTHING FROM PIPEDREAM. NOW, IF YOU PRINT FROM BASIC OR THE FILER, THE LEFT MARGIN WILL BE WHATEVER YOU CHOSE AS n.

THIS IS HANDY IF YOU WANT TO 3-HOLE PUNCH YOUR PRINT-OUT.

THE FOLLOWING PROGRAM, THAT I DESIGNED, DEMONSTRATES 80% OF THE THINKING PROCESSES REQUIRED TO WRITE PROGRAMS AND THE RUDIMENTARY FORMATTING REQUIRED. IF THIS TITILLATES YOUR INTEREST IN PROGRAMMING, THEN THE REST OF THIS SECTION ON BASIC SHOULD EXCITE YOU MORE.

200 *NAME SEVEN-10.BAS	<u>SAMPLE PRINT-OUT</u>	
220 A\$="SEVEN-10.BAS"		
240 REPEAT	2 3 8 4 4 2 9	SEE P.8A
260 PRINTTAB(12);	4 0 1 2 6 1 1	MAN.A
280 FORN=1TO7	0 9 9 2 6 5 8	
300 PRINT;(RND(10)-1);CHR\$32;	1 3 2 7 7 1 7	
320 FORT=1TO678:NEXT	3 4 3 3 1 0 4	
340 IFN=3 GOSUB400	4 6 2 1 5 1 5	
360 NEXTN	7 1 1 2 6 6 0	
380 UNTIL FALSE	9 0 4 2 0 2 0	
400 PRINT " ";		
420 RETURN		
440 REM THIS PROGRAM BY MIKE FINK WAS DESIGNED TO		
DEMONSTRATE SOME OF THE FEATURES, AND METHODS		
460 REM OF PROGRAMMING AND FORMATTING		

=====

LINE NO. 200 REQUIRES A SPACE BETWEEN NAME AND THE FILE NAME, NO QUOTES ARE REQUIRED. THE PURPOSE FOR THIS TYPE OF NAMING, IS TO ALLOW THE NAME OF THE BASIC FILE IN USE TO HAVE ITS NAME VISIBLE IN SUSPENDED ACTIVITIES.

LINE NO. 220 REQUIRES QUOTES AROUND THE A\$ NAME .. A\$ CANNOT BE USED ELSEWHERE IN THE PROGRAM. THE PURPOSE FOR USING THIS TYPE OF NAMING IS TO MAKE IT QUICK AND EASY TO SAVE A PROGRAM. WHEN IT COMES TIME TO SAVE YOUR PROGRAM .... YOU ORDINARILY WOULD TYPE SAVE "SEVEN-10.BAS". IF THE NAME CHOSEN WAS NOT VISIBLE WHEN THE TIME TO SAVE OCCURS, or, YOU FORGOT THE NAME YOU CHOSE, or, YOU MIS-TYPED IT .. ALL OF THESE MAKE TROUBLE, OR TAKE TIME; WHEREAS, IF LINE 220 IS USED, YOU ONLY NEED TO TYPE .. SAVEA\$ !!!

LINE 240 & 380 ARE OBVIOUS, EXCEPT THAT YOU CAN CHANGE FALSE TO SOME OTHER CONDITION YOU WISH TO IMPOSE, TO TELL IT WHEN TO STOP.

LINE 260 SAYS: BEGIN PRINTING 12 SPACES FROM THE LEFT. LINE 260 CAN BE OMITTED, OR 12 CAN BE CHANGED. THE SEMICOLON (;), MEANS THE NEXT PRINTING WILL BE ADJACENT TO IT.

LINE 280 & 300 & 360 ARE A FOR-NEXT LOOP, ASKING THE Z88 TO RANDOMLY SELECT A DIGIT BETWEEN 0 AND 9, PRINT IT IMMEDIATELY AFTER SPACE 12, THEN PRINT CHR\$32, WHICH IS A BLANK SPACE, AND DO IT 7 TIMES. THE SEMICOLON AFTER THE PRINT IN LINE 300, DETERMINES THE SPACING BETWEEN EACH NUMBER. TRY OMITTING THIS COLON AND SEE WHAT HAPPENS?

LINE 320 IS A TIME WASTER, TO SLOW DOWN THE PRINTING ON THE SCREEN ... WHICH WOULD BE TOO FAST OTHERWISE. NOTICE THAT THE T AFTER NEXT, IS SOMETIMES OPTIONAL.

LINE 340 IS DESIGNED TO SEPARATE THE FIRST 3 NOS. ... FROM THE NEXT 4 ... BY PRINTING ANOTHER BLANK SPACE, (LINE 400), AFTER PRINTING THE FIRST 3 NOS. .... NOTICE THAT THIS BLANK SPACE IS A SPACE BETWEEN QUOTES ... THE Z88 USUALLY GIVES YOU MORE THAN 1 WAY TO ACCOMPLISH A GOAL. THE GOSUB MEANS: THAT WHEN THE 3rd NO. IS PRINTED, GOTO LINE 400, DO WHAT IT SAYS, AND THEN RETURN TO WHERE THE INTERRUPTION TOOK PLACE.

LINE 360 IS NECESSARY TO COMPLETE THE FOR-NEXT-LOOP.

LINE 420 IS NECESSARY WHEN A GOSUB IS INVOKED.

LINE 440 IF SEEN ON THE SCREEN .. HAS THE RIGHT NO. OF SPACES BETWEEN THE WORD TO AND THE WORD DEMONSTRATE, TO ALLOW THE SCREEN PRINTING TO LINE UP EACH LINE .. THIS MAY BE CONTINUED, BUT YOU WILL RUN OUT OF ROOM AFTER 256 SPACES .... WHICH IS WHY I CONTINUED WITH LINE 460, STILL KEEPING THE BEGINNING OF EACH LINE IN LINE.

WHEN USING PRINT COMMANDS IN BASIC, SEE P.30 IN THIS MANUAL (BASIC .PED)  
ALSO, SEE PAGES 157 AND 166 OF THE CAMBRIDGE MANUAL.

IT IS POSSIBLE, WITH SPECIAL COMMANDS, TO ALLOW AUTOMATIC PAPER PRINTING FROM A BASIC PROGRAM, WITHOUT HAVING TO TYPE SQUARE +P TO THE SCREEN. SEE P.8C MAN.B

THE FOLLOWING REFERS TO THE SAMPLE BASIC PROGRAM FOUND ON P.30 OF MAN.B (PED.PD)

r as used in the sample program; lines 140, 180

r=65 = CONDENSED	r=66 = BOLD
r=69 = USER DEFINED	r=73 = ITALICS
r=76 = SUBSCRIPT	r=83 = SUPERScript
r=85 = UNDERLINE	r=88 = EXTENDED SEQUENCE

THE FOLLOWING BOOKS ARE AVAILABLE FROM DOMINO CUBES .....

BBC BASIC .....	R.B.COATS .....	\$??
BBC REFERENCE MANUAL .....	M-TEC .....	\$44
BBC LIST OF COMMANDS AND FUNCTIONS ONLY .....	DOMINO CUBES ...	\$15
PROGRAMS IN BBC BASIC FOR YOUNG MATHEMATICIANS .....	BREWER .....	\$??
DEVELOPERS NOTES .....	CAMBRIDGE .....	\$50
USERS GUIDE .....	CAMBRIDGE .....	\$35
Z88 MAGIC .....	KUMA .....	\$38
MANUAL A-B AND OTHERS .....	MIKE FINK .....	\$30

THE EASIEST EDITING FOR BASIC IS NOW DEMONSTRATED ON THIS PAGE;

THE PROGRAM BELOW SHOULD BE COPIED, NAMED BASIC-EDIT.CLI, THEN SAVED AS PLAIN TEXT.

```
#B      /
.J      THE REASON THE LINE NOS. ARE SO WEIRD, IS TO PREVENT
22223 END      THEM FROM MATCHING AND OVERTYPING EXISTING LINE NOS. IN THE
22253 DEF PROCE(B)      PROGRAM YOU ARE ADDING THIS LINE EDITOR TO. AFTER YOU HAVE
22283 IF B=0 THEN ENDPROC      STARTED YOUR PROGRAM, (WHICH SHOULD BE THE ONLY BASIC FILE
22313 A=OPENOUT":RAM.1/EE.CLI"      IN SUSPENDED ACTIVITIES), EXECUTE, (FROM THE FILER),
22343 B$=":RAM.1/E.CLI"      THE FILE BASIC-EDIT.CLI. WHEN FINISHED, RENUMBER
22373 PRINT#A,".>" + B$      YOUR LINE NUMBERS, (P.159 BASIC COMMANDS). NOW, AS
22403 PRINT#A,".J", "LIST" + STR$(B), "PROCF"      YOU NEED TO EDIT A LINE, JUST TYPE
22433 CLOSE#A      PROCE(NNNNN), WHERE NNNNN IS THE LINE
22463 *CLI .*:RAM.1/EE.CLI      NO. AND THE LINE TO EDIT WILL APPEAR ON
22493 ENDPROC      THE SCREEN WITH THE CURSOR AT THE END OF THE LINE.
22553 DEF PROCF      TO DO FANCY PROGRAMMING, YOU SHOULD READ AND LEARN
22583 A=INKEY(0)      PROCEDURES FROM CHAPTER 2-37 OF THE GREAT BOOK
22613 A=OPENIN B$      BBC BASIC REF.MANUAL
22643 INPUT#A,A$,A$      ($44 FROM DOMINO CUBES)
22673 CLOSE#A
22703 A=OPENOUT B$
22733 PRINT#A,".J",A$      <---THIS PROGRAM FROM THE BOOK, IS GIVEN HERE TO MY
22763 PTR#A=PTR#A-1      MANUAL B CUSTOMERS FREE, AS A COURTESY FROM
22793 BPUT#A,0      DOMINO CUBES
22823 CLOSE#A
22853 *ERASE :RAM.1/EE.CLI      MIKE FINK
22883 VDU 8
22913 OSCLI "*CLI .<" + B$
22943 ENDPROC
```

---

AFTER USING THE PROCE(NNNN) EDITING COMMAND, A FILE, E.CLI .. WILL APPEAR IN THE RAM.1 DIRECTORY. IF THIS IS NOT REMOVED, EVENTUALLY THE Z88 WILL FAIL .... ERASING THIS FILE IS A SMALL PRICE TO PAY FOR THE EASE OF EDITING THIS PROGRAM ALLOWS. I HAVE CHANGED RAM.0 TO RAM.1 SO YOU CAN SEE THE FILE E.CLI AND NOT FORGET. MIKE FINK

---

RUN

THIS PAGE PRINTED BY THE INTERNAL  
ROBOT INSIDE THE PHENOMENAL Z-88  
AUTOMATICALLY, FROM THE ALARM !!!  
■■■■■YOU MAY KEEP THIS PAGE ■■■■■

DOMINO CUBES CAN BE FOUND AT  
352 7th AVE 15th FLR N.Y.CITY

THE FOLLOWING LOTTO NOS. ARE CREATED BY  
A SIMPLE PROGRAM IN BASIC, BY MIKE FINK

1	-	10	31	5	33	48	38
2	-	12	20	41	40	4	17
3	-	46	29	17	18	8	50
4	-	49	43	40	39	29	54
5	-	38	4	29	14	13	33
6	-	46	32	52	45	33	29
7	-	21	42	12	25	13	23
8	-	10	1	49	19	50	33
9	-	25	43	17	2	44	8
10	-	29	42	49	48	45	32
11	-	9	20	45	46	12	3
12	-	13	42	10	35	30	11
13	-	41	7	48	50	49	12
14	-	28	27	40	10	5	33
15	-	14	41	6	17	50	15
16	-	18	49	9	13	40	12
17	-	39	5	4	27	2	37
18	-	1	36	23	22	18	29
19	-	32	10	37	14	16	19
20	-	12	49	52	15	50	19
21	-	14	4	12	32	23	51
22	-	5	54	31	34	41	11
23	-	12	20	33	50	18	10
24	-	30	1	40	28	5	14
25	-	18	36	17	43	26	23
26	-	31	13	46	19	21	47
27	-	30	23	49	26	39	51
28	-	25	47	15	54	32	11
29	-	18	16	48	54	47	37
30	-	51	32	36	46	28	1
31	-	28	51	10	5	26	37
32	-	1	44	35	12	2	40
33	-	8	14	47	49	12	44
34	-	29	26	37	8	11	31
35	-	45	13	8	41	10	43
36	-	8	40	22	27	13	1
37	-	20	43	12	19	31	54
38	-	46	36	7	51	19	16
39	-	31	37	50	11	4	45
40	-	10	45	7	28	35	32
41	-	8	24	31	51	7	2
42	-	53	10	22	20	38	23
43	-	33	29	52	23	41	13
44	-	50	34	24	4	5	45
45	-	15	16	31	41	39	30
46	-	23	16	28	12	50	53
47	-	46	40	35	41	34	33
48	-	4	7	40	3	43	36
49	-	48	52	4	19	36	32
50	-	48	20	53	18	12	15

>

PAGE 8 B WAS AUTOMATICALLY PRINTED BY THE CLI-MACRO ABILITIES OF THE Z88 AND THE CLEVERNESS OF MIKE FINK.

FIRST, CREATE A FILE YOU WISH PRINTED AT A CERTAIN TIME. IT CAN BE EITHER A PIPEDREAM FILE OR A BASIC FILE. HERE, I CHOSE A BASIC FILE, AS IT IS MORE EXCITING. SECONDLY, CREATE A CLI THAT WILL, WHEN EXECUTED RUN THIS PROGRAM. THIRDLY, IT IS DESIREABLE, BUT NOT NECESSARY, TO CREATE AN ALARM TO EXECUTE THE FIRST CLI AT THE TIMES YOU DESIRE. IF YOU CHOOSE TO NOT USE THE ALARM, YOU CAN MANUALLY EXECUTE THE FIRST CLI AT WILL.

TO LEARN HOW TO DO ALL THESE THINGS YOU CAN READ MY MANUALS CAREFULLY, OR BUY THE PACKAGE ON AN EPROM. (OR DISK IF YOU HAVE OUR DISK DRIVE).

WHAT I HAVE DONE, IS TO SET UP THE Z88 AND A PRINTER IN A STORE, OR ADVERTISING ENVIRONMENT, AND PROGRAM THE ALARM TO PRINT FIRST THE BASIC PROGRAM AND THEN AT SOME CONVENIENT INTERVAL, MAKE THE Z88 PRINT SOMETHING ELSE THAT IS FASCINATING AND THEN CYCLE THESE EVENTS AS OFTEN AS DESIRED. THIS ALLOWS ME TOTAL FREEDOM TO TALK AND WALK WITH CUSTOMERS WHILE MY ROBOT TAKES CARE OF THE DEMONSTRATIONS!!!!!!

SHOULD YOU HAVE A NEED FOR SUCH POWER, I HAVE CREATED A WAY FOR YOU TO POSSESS THIS FOR A NOMINAL FEE.

## DISK DRIVE

PAGE 9

THE DISK DRIVE USER'S INFORMATION WILL BE GIVEN FREE TO ALL CUSTOMERS BUYING A DISK DRIVE FROM DOMINO CUBES.

A DESCRIPTION OF THE FORM AND FUNCTION OF THE DISK DRIVE FOLLOWS:

DISK DRIVE TYPE 1 (PCIC)	ALL OF THESE DISK DRIVES ARE AVAIL-
DISK DRIVE TYPE 2 (XOB)	ABLE FROM DOMINO CUBES .. EACH TYPE
DISK DRIVE TYPE 3 (NOT READY)	HAS ITS OWN UNIQUE SOFTWARE AND ...
	CABLES. DISCS FROM TYPES 1 AND 2

ARE NOT COMPLETELY COMPATIBLE WITH ONE ANOTHER. THE PCIC IS NO LONGER EASILY AVAILABLE. TYPES 1 AND 2 ARE 6" BY 5" BY 2" HIGH, AND WEIGH ABOUT 2 POUNDS. EACH USES 3-1/2" SINGLE OR DOUBLE-SIDED DISKS. THE DISK CAN HOLD 202K. IT IS FORMATTED FOR 2 BANKS, EACH WITH ROOM FOR 40 TITLES. IT CAN RUN BY 4 AA BATTERIES OR A 6 VOLT AC/ADAPTER WITH POLARITY OPPOSITE FROM THE Z88. MAXIMUM SIZE OF A SINGLE FILE IS 64K. THE APPROPRIATE SOFTWARE IS SUPPLIED ON A 32K EPROM, WHICH ONCE LOADED (FROM SLOT 3 ONLY!) INTO THE Z'S FILER, CAN BE REMOVED FROM SLOT 3. THE OPERATION REQUIRES A SPECIAL CABLE DESIGNED & SUPPLIED BY DOMINO CUBES. AND, OF COURSE, THE OPERATING MANUAL.

SAVING FILES ON AN EPROM, COSTS ABOUT 180 TIMES MORE THAN SAVING THEM ON A DISK. (AFTER THE INITIAL COST OF THE DISK DRIVE).

SAVING FILES ON AN EPROM IS LIGHTER ... AND MORE CONVENIENT FOR TRAVEL BUT IT REQUIRES AN EPROM ERASER TO CHANGE A FILE ON THE EPROM.

CHANGING FILES WITH A DISK DRIVE IS EASIER ... BUT THEN YOU HAVE EXTRA WEIGHT AND INITIAL EXPENSE, ALTHOUGH, IN THE LONG RUN, IT IS MUCH CHEAPER.

---

TYPE 3 IS IN THE PROCESS OF DESIGN. IT WILL BE MUCH LIGHTER, FASTER, AND CHANGEABLE FROM THE Z88 ..... IT WILL ALLOW YOU TO CARRY THE TOTAL INFORMATION IN THE WHOLE WORLD IN YOUR SHIRT POCKET . AND BRING IT BACK AND FORTH TO THE Z88 AT WILL ! \* ! \* ! AS WELL AS ADDING TO IT !

TYPE 3 DISK DRIVE INFO WILL LOOK AND WEIGH LIKE A CREDIT CARD !!!!!!!

## HOW TO USE FILER COMMANDS (C)1990 MIKE FINK

DO NOT CONFUSE WITH MENU COMMANDS!!

WHEN IN THE FILER, DO NOT USE MENU, IT IS EASIER AND BETTER TO USE THE COMMANDS FROM THE FILER SCREEN COMMAND COLUMN. JUST MOVE THE HI-LITE TO THE COMMAND YOU WANT, USING THE ARROWS. YOU NOW HAVE 2 PATHS TO HAVE THE COMMAND REACH THE FILE OR FILES YOU WISH, A & B ..

- A. IF YOU PRESS ENTER, THE SCREEN WILL SHOW A BLINKING CURSOR REQUESTING YOU TO TYPE THE FILE DESCRIPTION. ENTER
- B. USE ARROWS TO REACH FILE OR FILES YOU ARE CONCERNED WITH, AND MARK EACH ONE (WHEN THE HI-LITE IS ON THE FILE) BY PRESSING TAB. THEN USE ARROW TO REACH THE COMMAND THEN ENTER.

### C O M M A N D

### ACTION

A. :*/xyz	FINDS FILE xyz ANYWHERE
B. xyz*	FINDS FILES BEGINNING WITH xyz IN CURRENT RAM
C. *xyz*	FINDS FILES CONTAINING xyz IN CURRENT RAM
D. ../xyz*	FINDS FILES BEGINNING WITH xyz IN PARENT DIRECTORY
E. ../*xyz*	FINDS FILES CONTAINING xyz IN PARENT DIRECTORY
F. *.*	FINDS FILES WITH EXTENSIONS IN CURRENT RAM

SEE ADVANCED USE OF THE FILER P.194 CAMBRIDGE

=====

WHEN YOU LOOK AT A FILE NAME IN THE FILER, YOU DON'T KNOW IF IT IS A PIPEDREAM FILE, A DIARY FILE, A FILE IN BASIC OR WHAT? UNLESS AFTER THE NAME YOU PUT dot and a 1,2 or 3 LETTER CODE TO DESCRIBE WHERE THE FILE BELONGS ... IT IS NOW POSSIBLE TO ASK THE FILER TO LIST OR PRINT ONLY THOSE FILES THAT MEET THE CRITERIA YOU IMPOSE.

### SAMPLE EXTENSION CODES I USE:

.ADV	ADVERTISING FILES
.BAS	BASIC FILES
.D	DIARY FILES
.LTR	LETTER FILES
.PAN	PANEL FILES
.PD	PIPEDREAM FILES
.PED	PRINTER EDITOR FILES

SEE P.194-5 OF CAMBRIDGE  
INSTRUCTION MANUAL

TO REMOVE A CLI, PRESS ♦ ESC  
CLI'S UNREMOVED INTERFERE  
WITH THE Z-88'S OPERATIONS.

### EXTENSIONS ALREADY USED BY THE Z-88

.CLI	CLI FILES
.L	LIST FILES
.SGN	:RAM-../ FILES AND OTHERS

=====

TO PRINT ON PAPER, CREATE CLI BY ... SQUARE + P (■ + P)

### EXAMPLES:

1. IF YOU WISHED TO LIST ON THE SCREEN, OR PRINT ON PAPER, ALL THE FILES THAT WERE BASIC ... HI-LITE CATALOG FILES ... ENTER  
TYPE .. \*.BAS THEN SQ.+P then enter
2. IF YOUR FILE WAS NAMED JANSON, OR JENSEN, OR JOHNSON AND YOU COULDN'T REMEMBER, AND IT WAS A .LTR FILE, TYPE J????N.LTR  
THIS WILL FIND ALL .LTR FILES OF 6 LETTERS, BEGINNING WITH J & ENDING IN N; TO FIND JOHNSON REQUIRES ONE MORE QUESTION MARK, BECAUSE JOHNSON IS 7 LETTERS, OR TYPE J\*N.LTR THIS WILL FIND ALL .LTR FILES BEGINNING WITH J AND ENDING IN N REGARDLESS OF LENGTH.
3. IF YOU WISH TO LIST OR PRINT ALL FILES IN CURRENT RAM, JUST TYPE \*

## FILER

### HOW TO INSTAL RAM, ROM AND EPROMS

#### TO INSTAL A NEW RAM CARD IN SLOT 1, (OR 2)

1. SAVE EXISTING IMPORTANT FILES TO A MEMORY DEVICE, (EPROM-DISK-PAPER)
2. OPEN FLAP, REMOVE ALL CARDS, LOSING ALL RAM DATA
3. INSERT BIGGEST RAM IN SLOT 1
4. PUT PIN IN RESET HOLE, WITH FLAP OPEN, SEE P.21- CAMBRIDGE
5. CLOSE FLAP, AFTER HARD RESET, RESET CLOCK (AMERICAN OR EUROPEAN)
6. RESET PANEL, CHANGE DEFAULT DEVICE ZERO TO 1
7. SELECT DEVICE FROM FILER, CHANGE ZERO TO 1
8. GO TO INDEX TYPE ♦CARD TO MAKE SURE THE Z SEES ALL THE CARDS.

#### TO INSTAL A ROM CARD, USE SLOT 2

1. PRESS INDEX, OPEN FLAP, INSERT ROM IN SLOT 2, CLOSE FLAP.
2. TYPE ♦CARD TO MAKE SURE THE Z SEES ALL THE CARDS.
3. USE THE UP AND DOWN ARROWS IN APPLICATIONS TO SEE THE NEW ROM

IF AN APPLICATION FROM YOUR SLOT 2 ROM IS IS SUSPENDED ACTIVITIES, AND YOU TRY TO REMOVE THE ROM, IT WILL BEEP OR WHINE. REINSERT THE ROM, AND KILL THE SUSPENDED FILE. NOW YOU CAN REMOVE IT.

#### TO INSTAL AN EPROM CARD, YOU MUST USE SLOT 3 ONLY!!

1. OPEN FLAP, FROM ANY SCREEN, INSERT EPROM, CLOSE FLAP
2. GO TO INDEX TYPE ♦CARD TO MAKE SURE THE Z SEES ALL THE CARDS.
3. IF CARD IS NOT NOTICED, GO TO FILER, CATALOG EPROM, ENTER, GO TO 2

THE EPROM CAN BE REMOVED ANY TIME IT IS NOT BEING READ OR WRITTEN TO.. ONCE THE FILES ARE IN THE FILER, THEY CAN BE LOADED INTO THEIR RESPECTIVE APPLICATION.

WHEN YOU PRINT FROM THE FILER, OR BASIC, WITH ■+P, THE FIRST LETTER APPEARS WITH A LEFT MARGIN = 0. YOU CAN CHANGE THE LEFT MARGIN IF YOUR PRINTER HAS SUCH A COMMAND, MOST DOT-MATRIX AND INK-JET PRINTERS DO. GO TO THE PRINTER EDITOR, AT EXTENDED SEQ. USE 27,"1",n & 27,"1",0 .. "1" = LOWER CASE L = ASCII 108  
or USE 27,108,n & 27,108,0 .. ACTIVATE THE .PED THEN SEND THIS TO THE PRINTER BY PRINTING ANYTHING FROM PIPEDREAM .... NOW, IF YOU PRINT FROM BASIC OR THE FILER, THE LEFT MARGIN WILL BE WHATEVER YOU CHOSE AS n.

THIS IS HANDY IF YOU WANT TO 3-HOLE PUNCH YOUR PRINT-OUT.

**FILER**

THERE ARE 2 WAYS TO GET FILES, INTO THE EPROM; A and B;

- A1 .** MOVE HILITE TO SAVE TO EPROM, ENTER  
**A2 .** NEXT TO NAME, TYPE NAME OF FILE  
**A3 .** PRESS ENTER, DOES ONE FILE AT A TIME.

- =====
- B1 .** MOVE HILITE TO EACH FILE YOU WISH TO SAVE TO EPROM, AND PRESS TAB TO CREATE A LITTLE MARK SO THE COMPUTER KNOWS WHICH FILES THE COMMAND SHOULD ADDRESS ITSELF TO. THIS IS TRUE FOR SOME OF THE OTHER COMMANDS.
- B2 .** MOVE HI-LITE TO SAVE TO EPROM, ENTER .. IT WILL SAVE THE FILES IN THE ORDER THEY WERE MARKED.

MARKING MORE THAN 1 FILE AT A TIME WILL ONLY WORK FOR THE FOLLOWING COMMANDS: CATALOG FILES, (OR EPROM), SAVE TO EPROM, RENAME AND ERASE. FETCH FROM EPROM CAN ONLY DO 1 FILE AT A TIME UNLESS YOU USE THE FOLLOWING: EPROM-FETCH.BAS OR MY SAFER PROGRAM SHOWN ON P.12

=====

TO GET FILES ONE AT A TIME FROM THE EPROM TO THE FILER; THE COMMAND FETCH FROM EPROM IS USED, (◆EF), WHICH GIVES A SCREEN SHOWING ....

SOURCE: and DESTINATION:

SOURCE: ASKS YOU TO TYPE THE FILE NAME, THEN ENTER  
 THE FILE NAME WILL AUTOMATICALLY BE COPIED TO DESTINATION: ...IF YOU PRESS ENTER AGAIN, THE FILE WILL BE SENT TO THE FILER ..... BEFORE YOU PRESS THE SECOND ENTER, YOU HAVE THE OPTION OF CHANGING THE FILE NAME, OR SENDING IT TO ANOTHER PLACE, USING THE FULL FILE NAME IE; :DEVICE/DIRECTORY/DIRECTORY/FILE NAME.EXT SEE P.194-5 (CAMBRIDGE)

=====

TO LOAD MULTIPLE FILES FROM AN EPROM, TO THE FILER,

THERE ARE AT LEAST 3 WAYS

1. BUY A BASIC PROGRAM CALLED, EPROM-FETCH.BAS FROM DOMINO CUBES, AND RUN IT .. THIS PROGRAM (WRITTEN BY OTHERS), WILL LOAD ALL THE EPROM FILES WITHOUT YOU TYPING TITLES ..... IT WILL ALSO CREATE A FILE IN RAM.- THAT; IF NOT FOUND AND ERASED, WILL SOON CAUSE THE Z88 TO CRASH ... SINCE IT IS NOT VISIBLE IN THE RAM.1 DIRECTORY, YOU CAN EASILY FORGET TO ERASE IT.
2. THIS PROGRAM, DESIGNED BY DOMINO CUBES, ALLOWS YOU TO CHOOSE ANY OR ALL OF THE FILES YOU WISH, PLUS, YOU CAN ALPHABETIZE THEM BY NAME OR BY EXTENSION OR WHATEVER ... THIS METHOD ASKS YOU TO EXECUTE THE FILE EPROM.CLI THAT YOU HAVE JUST CREATED AFTER TYPING THE NAMES OF THE FILES WITH THE NECESSARY MACRO COMMANDS. THIS ELIMINATES THE DANGEROUS :RAM.- FILES! SEE BELOW

=====

CREATE A .CLI FILE CALLED EPROM.CLI, AND TYPE THE TITLES IN THE ORDER YOU WISH THEM LOADED, USING ONE LINE FOR EACH FILE:

```
~ I | [
#F | EF FIRST FILE NAME ~E~E
#F | EF SECOND FILE NAME ~E~E
#F | EF THIRD FILE NAME ~E~E
```

SAVE FILE AS PLAIN TEXT, THEN GO TO THE FILER AND EXECUTE!  
 THE ONLY POSSIBLE ERRORS WILL BE IN YOUR TYPING.

=====

PAGES 12 AND 13 REQUIRE THE EMPTY.PED TO PRINT PROPERLY

FILER continued from P.12

3. THE THIRD AND BEST METHOD, (ALSO DESIGNED BY MIKE FINK), IS AS FOLLOWS; (NO TYPING OF TITLES REQUIRED)

- A. ■F, ARROWS TO HI-LITE CATALOGUE EPROM, ■+S, ENTER, WHEN SCREEN IS DONE, ■-S
- B. ♦EX S-SGN.CLI, ENTER
- C. LOAD NEW-FILE.PD AS PLAIN TEXT, DELETE BOTTOM LINE, MAKE FILE LOOK LIKE BELOW; USING 3 COLUMNS IS DESIRABLE::

```

~ I | [
#F | EF FIRST FILE NAME ~E~E
#F | EF SECOND FILE NAME ~E~E
#F | EF THIRD FILE NAME ~E~E
#F | EF LAST FILE NAME ~E~E

```

RENAME AND SAVE AS PLAIN TEXT, WITH A .CLI EXTENSION.

EXECUTE .....

FILES WILL BE LOADED IN THE ORDER YOU CHOSE, WITH NO TYPING ERRORS, BECAUSE THE Z88 TYPED THEM FOR YOU, FLAWLESSLY, AND THERE IS NO :RAM.-LEFT, BECAUSE THE S-SGN.CLI REMOVED IT FOR YOU!!!!

DESIGNED AND (C) BY MIKE FINK 1994

---

SEE APPENDIX D, CAMBRIDGE MANUAL

THIS METHOD OF CAPTURING SCREEN TEXT, DATA, ETC. REQUIRES ENOUGH UNUSED MEMORY SPACE IN :RAM.-

THE SAME METHOD APPLIES WHEN YOU WISH TO CAPTURE KEYBOARD INPUT, EXCEPT THAT YOU USE ■+K INSTEAD OF ■+S ... AND MODIFY S-SGN.CLI TO BECOME K-SGN.CLI ...

IF YOU HAVE A BASIC PROGRAM THAT GENERATES SCREEN OUTPUT, AND YOU WISH TO CAPTURE ALL THE OUTPUT, JUST USE ■+S .... DON'T FORGET, WHEN DONE, **ALWAYS**, END THE CAPTURE WITH THE MINUS COMMAND TO REMOVE THE CLI ON THE SCREEN.

---

```

~ I | [
#F | SV | ~R~X-~E~R~T | CO
:RAM.1/NEW-FILE.PD~E~E | ER
S.SGN~E~E | SV | ~R~X1~E

```

THE SYMBOLS ON THE  
LEFT ARE THE FILE  
S-SGN.CLI

## IMPORT-EXPORT APPLICATION

FOUR Z88 INSTRUCTION MANUALS HAVE BEEN WRITTEN, BESIDES THE AWFUL MANUAL THAT CAMBRIDGE MADE. NO ONE; ANYWHERE - ANYTIME - ANYPLACE, HAS EVER PROPERLY EXPLAINED OR DISCUSSED HOW TO USE THE IMPORT-EXPORT APPLICATION, EXCEPT 'DOMINO CUBES' AND "Z88-MAGIC".

TO BRING IMP/EXP TO THE SCREEN, PRESS THE SQUARE KEY THEN X. OF COURSE AS IT IS WITH ALL Z88 APPLICATIONS, IF YOU CAN'T REMEMBER THE RIGHT KEY TO PRESS AFTER THE SQUARE KEY, YOU CAN ALWAYS GO TO THE INDEX AND SCROLL UNTIL THE HILITE IS WHERE YOU WANT, THEN PRESS ENTER.

IN ORDER TO USE IMP/EXP, YOU MUST HAVE THE FOLLOWING TWO THINGS;

1. A CABLE TO CONNECT THE 232 SERIAL PORT OF THE Z88 TO THE SERIAL PORT OF THE OTHER COMPUTER,
2. A PROGRAM IN THE OTHER COMPUTER WHICH WILL SUPERVISE THE TRANSFER OF FILES TO AND FROM THE Z88. NATURALLY IF THE OTHER COMPUTER IS ALSO A Z88, THERE IS NO PROBLEM.

THE PROGRAM RUNNING ON THE OTHER COMPUTER MUST DO THE FOLLOWING|

- A. SELECT THE CORRECT SERIAL PORT FOR INPUT/OUTPUT
- B. SET UP THE SERIAL PARAMETERS, SUCH AS BAUD RATE, SO THAT THEY ARE THE SAME AS THOSE ON THE Z88.  
Xon/Xoff SHOULD BE SET TO Yes, AND BOTH COMPUTERS MUST HAVE THE SAME BAUD RATE AND PARITY!!!!!!!
- C. FOLLOW THE Z88 IMP/EXP PROTOCOL TO ACCOMPLISH THE TRANSFER OF FILES.

YOU CAN BUY PROGRAMS THAT ALLOW FILE TRANSFER FOR IBM'S, MAC'S, ATARI ST, AND OTHERS. (AVAILABLE FROM DOMINO CUBES)

IF YOU HAVE OUR FAX/MODEM, OR ANY MODEM THAT WORKS WITH THE Z88, YOU CAN EXPORT AND IMPORT YOUR FILES OVER THE PHONE LINES TO ANY COMPUTER!! THIS ELIMINATES SHIPPING AND WRAPPING COSTS, CUSTOMS FEES, AND HANDLING TIME, RESULTING IN ENORMOUS SAVINGS.

TYPE THE FIRST LETTER OF ANY OF THE FOUR COMMANDS; EXAMPLE: TO SEND

S ENTER, SCREEN ASKS FOR FILE NAME? TYPE IN NAME FROM FILER, OR ANY FULL PATHNAME IF FROM ANOTHER STORAGE PLACE.  
THE OTHER COMPUTER MUST BE READY TO RECEIVE BEFORE YOU PRESS ENTER TO SEND FROM IMP/EXP ..

IF YOU WISH TO SEND MORE THAN 1 FILE, YOU CAN SEQUENTIALIZE THEM OR USE A WILDCARD; FOR EXAMPLE TO SEND ALL BASIC FILES USE \*.BAS ASSUMING THAT YOU HAVE USED THAT EXTENSION FOR ALL YOUR BASIC FILES.  
WHEN SENDING MORE THAN 1 FILE AT A TIME, YOU NEED TO TELL THE OTHER COMPUTER WHEN YOU HAVE FINISHED, AND YOU DO THIS BY PRESSING E THE FIRST LETTER OF THE E)nd batch COMMAND. ( OR ESCAPE)

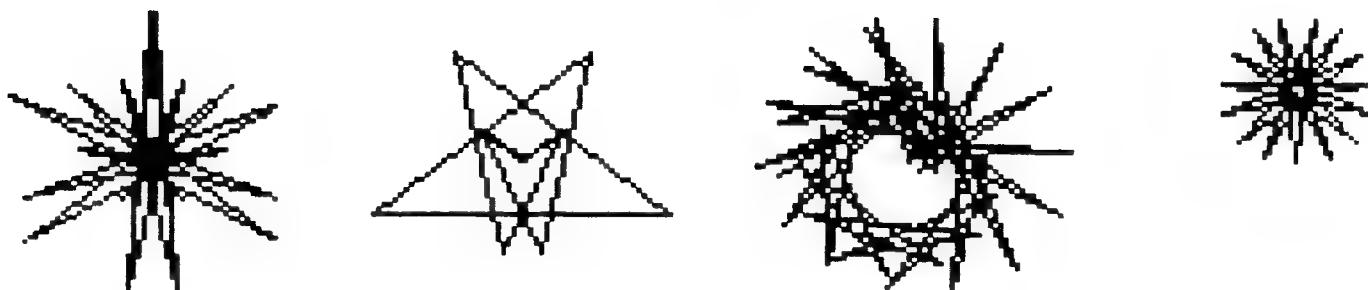
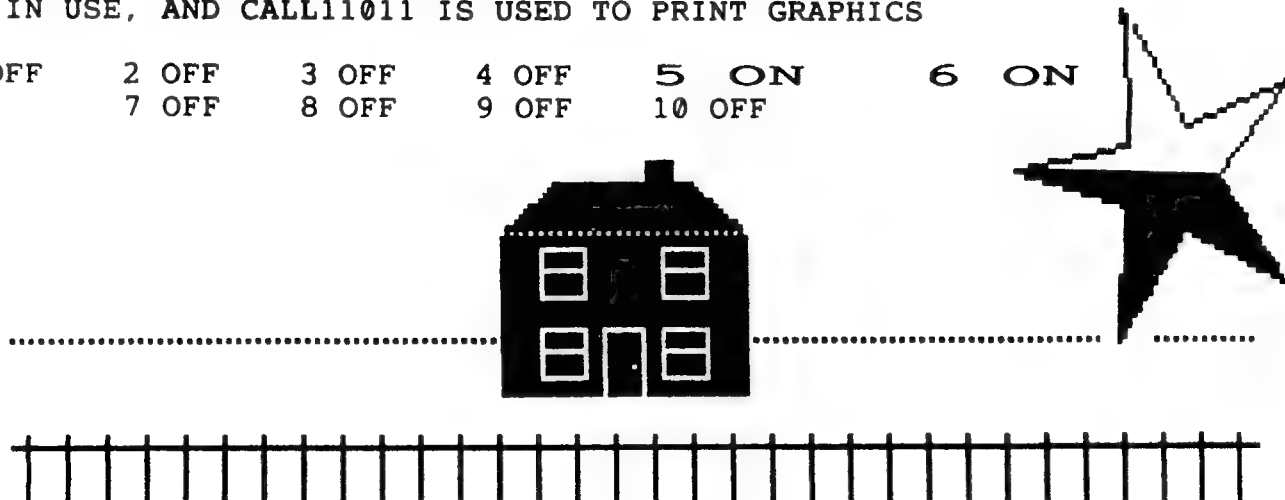
PRESS R)ecieve TO RECEIVE SINGLE FILES, WHEN THE SCREEN GIVES YOU THE Filename? PROMPT, YOU MAY TYPE A NEW NAME FOR THAT FILE OR PRESS ENTER AND THE Z88 WILL TYPE THE NAME SENT BY THE OTHER COMPUTER.

TO RECEIVE A BATCH OF FILES, USE B)atch receive. IT IS UP TO THE OTHER COMPUTER TO TELL THE Z WHEN IT IS DONE. YOU CAN OVERRIDE THIS AT THE Z88 END ANYTIME, BY PRESSING ESCAPE.

■ **DOMINO CUBES**    **PHONE 212-631-7563**    ■  
 ■ **352 7th AV 15th FL. FAX=947-5069**    ■  
 ■    ♠    ♥    **NEW YORK CITY 10001**    ♠    ♥    ■  
 ■    ♠    ♦    ♠    **PRESIDENT MIKE FINK**    ♥    ♠    ♥    ■

CANON 10EX BUBBLE-JET PRINTER .....  
 DIP SWITCH SETTINGS TO ALLOW 0 LINE SPACE BETWEEN LINES WHEN PATCH.BAS  
 IS IN USE, AND CALL11011 IS USED TO PRINT GRAPHICS

1 OFF    2 OFF    3 OFF    4 OFF    5 ON    6 ON  
           7 OFF    8 OFF    9 OFF    10 OFF

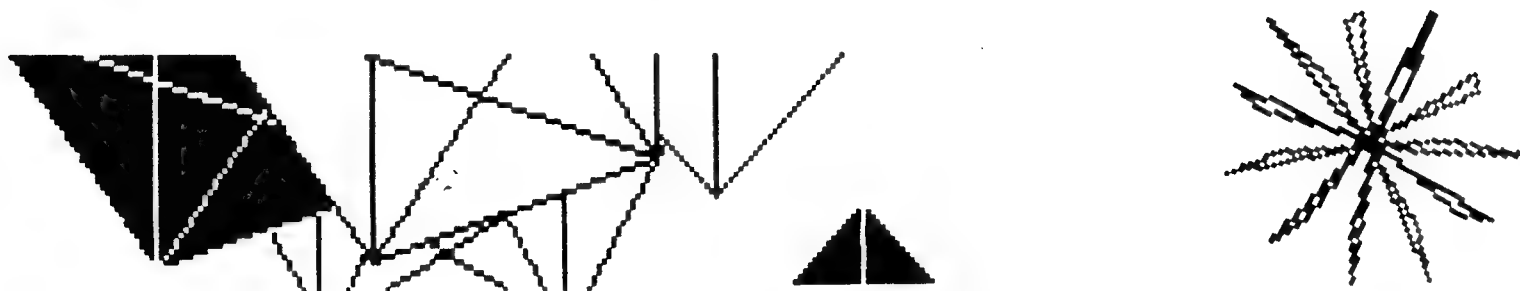


CANON 10EX  
 DIP SWITCH SETTINGS TO ALLOW 0 LINE SPACE BETWEEN LINES WHEN PATCH.BAS  
 IS IN USE, AND CALL11011 IS USED TO PRINT GRAPHICS

1 OFF    2 OFF    3 OFF    4 OFF    5 ON    6 ON  
           7 OFF    8 OFF    9 OFF    10 OFF

AS YOU CAN SEE FROM THE ABOVE, THE ZERO LINE SPACE REMAINS IN FORCE  
 AFTER GRAPHICS PRINTING UNLESS YOU RESET THE PRINTER, OR RESET THE LINE  
 SPACING IN THE PRINTER EDITOR.

ALL THE GRAPHICS ON THIS PAGE WERE MADE  
 FROM A PROGRAM IN BASIC AVAILABLE FROM  
 DOMINO CUBES. THE LOGO CAN BE MADE  
 WITHOUT BUYING THIS PROGRAM, JUST  
 KEYSTROKES ARE NEEDED



FORMATTING

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FORMATTING by MIKE FINK <C> 1989

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♠ ♠ ♥ ♦ ♠ ♠ ♥ ♦ ♠ ♠ ♥ ♦ ♠ ♠ ♥ ♦ ♠

=====

JUSTIFY SHOULD ONLY BE USED WHEN TYPING FONT CODES THAT DO NOT CHANGE THE WIDTH OF THE WORD! JUSTIFY WORKS ONLY ON THE TEXT TYPED **AFTER** YOU SELECT IT FROM THE OPTIONS PAGE....♦○.

IT DOES NOT TAKE INTO ACCOUNT THE DIFFERENT SPACING OF THE WORDS THAT HAVE CODES THAT CHANGE THE SPACE THEY USE. THE ONLY CODES THAT ARE USABLE BY JUSTIFY, ARE THOSE WHOSE SPACE REQUIREMENTS DO NOT CHANGE WHEN THE CODE IS APPLIED; IE; BOLD, ITALICS, SUPER AND SUBSCRIPTS.

ALL OTHER CODES, INCLUDING PROPORTIONAL, REQUIRE MANUAL ADJUSTMENT. I HAVE FOUND, THAT FOR ME, IT IS EASIER TO **NOT** USE THE JUSTIFY, **IF** I AM USING CODES THAT **CHANGE** THE WORD WIDTH. PROPORTIONAL KILLS JUSTIFY.

THE MAXIMUM NO. OF CHARACTER WIDTHS FOR ONE PRINTER EDITOR IS 7... THEY ARE SHOWN AT THE BEGINNING OF THIS PAGE. TO DO THIS, USE THE ELITE.PED, WHICH IS DESCRIBED IN MY ADVANCED MANUAL, MANUAL **B**. ALL OF THESE INSTRUCTIONS APPLY SPECIFICALLY TO MY SQUARE-DOT, 80 COLUMN PRINTER; ALTHOUGH THEY PROBABLY APPLY TO MOST ALL OF THE OTHER DOT-MATRIX PRINTERS AS WELL!!

THE FIRST STEP IS TO CHOOSE WHICH CHARACTER WIDTH YOU WISH TO USE FOR MOST OF YOUR DOCUMENT. THEN CHOOSE A TOTAL COLUMN WIDTH EQUAL TO THE TOTAL NO. OF CHARACTERS THAT WIDTH CAN PRINT ON AN 80 COLUMN PAGE, LESS 2 MARGINS. THE LEFT MARGIN YOU CHOOSE FROM ♦○, AND THE RIGHT MARGIN BY MOVING THE VERTICAL ARROW, TO THE LEFT OF COLUMN **F**, TO THE NEEDED POSITION, WITH ■-->, OR ■<--. THE SCREEN STARTS YOU OFF WITH SIX 12 CHARACTER COLUMNS, ASSUMING YOU WISH A 4 CHARACTER MARGIN LEFT AND RIGHT, WHICH WOULD ADD UP TO 80 IF YOU USE NORMAL PICA WIDTH CHARACTERS. IF YOU USE NARROWER CHARACTERS, YOU CAN FIT MORE OF THEM IN THE SAME SPACE, BUT THE PRINTER WILL ONLY PRINT THE 72 SHOWN ON YOUR SCREEN! IF YOU WISH TO PRINT ON PAPER THE EXTRA CHARACTERS, YOU MUST INCREASE 72 TO WHAT YOU NEED. YOU CAN EITHER, INCREASE THE WIDTH OF ONE OR MORE COLUMNS, OR ADD MORE COLUMNS. IN YOU NARROW THE PAGE MAP. GO TO ■ **S** AND CHANGE MAP SIZE ACCORDINGLY.

IF YOU WISH TO SEE 7 LINES OF TYPING ON THE SCREEN, INSTEAD OF 6, YOU CAN CHANGE BORDERS ON THE OPTIONS PAGE FROM Y TO N.

YOU CAN USE ITALICS AND BOLD AT THE SAME TIME ON A WORD AND STILL USE JUSTIFY. BOLD DOES NOT WORK ON ELITE NOR CONDENSED.

line 1	.....	80 column
line 2	PAGE PRINTING INFORMATION (C) MIKE FINK	80 column
line 3	.....	80 column
line 4	total characters per line = 80	80 column
line 5	.....	80 column
line 6	the single sheet printers cannot reach lines 64,65 and 66	80 column
line 7	unless fanfold paper is used..(holes removed)	80 column
line 8	.....	80 column
line 9	PICA; <u>66-BY80.GR</u> ; XOB:FORM-1:GRPH-1	80 column
line 10	.....	80 column
line 11	ADD TO MAN-B FORMATTING	80 column
line 12	.....	80 column
line 13	THIS PAGE HAS CHARACTERS ON ALL 66 LINES, BUT SINCE IT IS	80 column
line 14	PRINTED WITH A SINGLE SHEET PRINTER, 64,65 & 66 ARE MISSING	80 column
line 15	.....	80 column
line 16	.....	80 column
123456789a	123456789b123456789c123456789d123456789e123456789f123456789g123456789h	80 column
line 18	.....	80 column
line 19	.....	80 column
line 20	.....	80 column
line 21	.....	80 column
line 22	.....	80 column
line 23	.....	80 column
line 24	.....	80 column
line 25	.....	80 column
line 26	.....	80 column
line 27	.....	80 column
line 28	.....	80 column
line 29	.....	80 column
line 30	.....	80 column
line 31	.....	80 column
line 32	.....	80 column
line 33	.....	80 column
line 34	.....	80 column
line 35	.....	80 column
line 36	.....	80 column
line 37	.....	80 column
line 38	.....	80 column
line 39	.....	80 column
line 40	.....	80 column
line 41	.....	80 column
line 42	.....	80 column
line 43	.....	80 column
line 44	.....	80 column
line 45	.....	80 column
line 46	.....	80 column
line 47	.....	80 column
line 48	.....	80 column
line 49	.....	80 column
line 50	.....	80 column
line 51	.....	80 column
line 52	.....	80 column
line 53	.....	80 column
line 54	.....	80 column
line 55	.....	80 column
line 56	.....	80 column
line 57	.....	80 column
line 58	.....	80 column
line 59	.....	80 column
line 60	.....	80 column
line 61	.....	80 column
line 62	.....	80 column
line 63	..... PAGE 18 .....	80 column

DIARY-USE.PD (order created by mike fink/domino cubes)

THE DIARY IS A SINGLE FILE, WITH UNLIMITED BLANK PAGES. IT SEES ONLY THOSE PAGES THAT HAVE A DATE AND DATA, EVEN IF THE DATA IS AN ACCIDENTAL BLANK LINE. THE FILE SHOULD BE NAMED, AND SAVED. THE BEST WAY TO NAME THE FILE IS AS FOLLOWS: USING THE EUROPEAN DATE SYSTEM; ie; (DAY, MONTH, YEAR). EXAMPLE; 21JUL96.D AS EACH DAY PROGRESSES, THE DIARY SHOULD FIRST BE SAVED, (AFTER MODIFICATION AND PRUNING) AS THE NEW DAY DATE. DON'T FORGET THE .D! AFTER SAVING IT IN THE FILER, THE OLD DIARY DATE MUST BE ERASED FROM THE FILER. YOU SHOULD NEVER HAVE MORE THAN 1 DIARY DATE, AND NEVER HAVE NONE. THIS IS IMPORTANT IF YOU USE THE ALARM SYSTEM TO DAILY LOAD YOUR DIARY. BLOCK MARK THE STUFF YOU WANT TO SEE FIRST IN THE MORNING ON THE SCREEN. THE CURSOR MUST BE OUTSIDE OF THE MARKED BLOCK, BEFORE THE NEXT COMMAND. (EXCEPT Q and BD). WHEN PRUNING THE DIARY, BLOCK MARK TODAY'S INFO, PRESS SQUARE C, USE ARROWS TO GO TO NEXT DATE, PRESS SQUARE D, NOW DIAMOND BM. THIS WILL COPY TODAY'S DATA TO THE NEXT DAY SELECTED, OR THE NEW "TODAY", AND ERASES THE DATA BLOCK FROM THE OLD "TODAY". NOW SAVE THE NEW DIARY DATE, AND THEN ERASE THE OLD DIARY DATE FROM THE FILER. IF YOU LOAD A PIPEDREAM FILE INTO THE DIARY, USING THE PROPER PROCEDURES, IT WILL NOT COPY ANY %'S AS TEXT. YOU MUST REPLACE THE MISSING %'S. TO LOAD A PIPEDREAM FILE TO A DATE IN THE DIARY, YOU MUST HAVE THE FIRST CHARACTER, ON THE FIRST LINE, BE A % FOLLOWED BY DAY,SLASH,MONTH,SLASH,YEAR-if using the European dates.

EXAMPLE:

%22/3/67

FOLLOWING THE DATE IS YOUR TEXT TO BE SENT TO THE DIARY. IF YOU WISH TO COPY TEXT TO MORE THAN ONE DATE ... EACH DATE MUST HAVE ITS OWN % AND DATE.

STEPS TO FOLLOW:

1. TYPE % AND DATE
2. NAME AND SAVE PIPEDREAM FILE AS PLAIN TEXT!!!!!!!
3. GO TO DIARY (SQUARE D), DIAMOND FL MAKE SURE SPACE FOR NAME IS EMPTY. (YOU COULD TYPE THE FILE NAME NOW, BUT THE FOLLOWING IS BETTER).
4. SQUARE F, ARROW TO FILE NAME, HI-LITE IT, MARK IT WITH TAB,
5. PRESS ESCAPE, PRESS ENTER.
6. REPLACE MISSING %'S, IF ANY, FROM TEXT.

IN PIPEDREAM, IT IS POSSIBLE TO PRINT ONLY CERTAIN ROWS, COLUMNS OR CHOSEN AREAS.

IN THE DIARY, YOU HAVE TWO PRINT COMMANDS; THE NORMAL ONE FOUND IN THE BLOCKS MENU, AND THE SELECTIVE PRINTING FOUND UNDER THE SEARCH COMMAND. THIS ALLOWS YOU CHOOSE WHICH LINES (ROWS) YOU WISH TO PRINT BASED UPON YOUR SEARCH COMMAND. THE DIARY SEARCH COMMAND IS NOT AS VERSATILE AS THE PIPEDREAM SEARCH COMMAND, BUT IT DOES ALLOW SELECTIVE PRINTING. FOR INSTANCE IF YOU ONLY WANTED TO SEE OR PRINT A BIRTHDAY LIST ... YOU COULD DO THIS IF EACH INSTANCE OF A BIRTHDAY SAID BIRTHDAY ON ITS LINE. YOU COULD SEARCH FOR BIRT or IRTD or THD or BIRTHDAY. IF YOU ABBREVIATED BIRTHDAY AS BRTDY, YOU WOULD NEED TO MODIFY THE SEARCH COMMAND ACCORDINGLY.

DIARY-USE.PD

WHEN YOU WISH TO PRINT FROM THE DIARY APPLICATION, THE list/print MENU COMMAND GIVES SCREEN OPTIONS AS FOLLOWS:

1. LIST ON SCREEN .....YES
2. LIST ON PRINTER .....NO
3. LIST ONLY MARKED BLOCK .....NO

IF YOU TYPE Y, (AT LINE 2), THE PRINTER WILL PRINT A SCREEN AT A TIME, AND WAIT FOR YOU TO PRESS A KEY TO CONTINUE.

IF YOU TYPE Y, (AT LINE 2), AND TYPE N, (AT LINE 1)(screen), THE DIARY WILL BE FULLY PRINTED WITHOUT YOUR GUIDANCE.

THE DIARY Search COMMAND ALSO HAS A SIMILAR PRINT COMMAND.

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OPEN CAMBRIDGES MANUAL TO THE PANEL, PAGE 81.

OPEN MAN-A FROM DOMINO CUBES TO P.7 PRESS SQUARE S ON YOUR Z88.

THE FIRST PROBLEM TO SOLVE WHEN USING THE PANEL, IS TO MAKE SURE YOUR DATE SYSTEM IS EITHER American or European, WHICHEVER YOU PREFER.

TO REACH ANY PANEL OPTION, USE THE VERTICAL ARROWS, (OR HORIZONTAL). ONCE THERE, THE NEXT POSSIBLE CHOICE FOR THAT OPTION IS ATTAINABLE BY PRESSING ♦J, ESPECIALLY IF YOU DO NOT KNOW THE CHOICES. SOME ARE OBVIOUS, LIKE Yes OR No REQUIRES TYPING THE FIRST LETTER OF THE CHOICE. SIMILARLY FOR THE DATE CHOICE.

♦J DOES NOT WORK FOR THE Auto Repeat rate. YOU MUST CHOOSE A NUMBER BETWEEN 0 AND 99.

WHEN A NEW EMPTY FILE IS LOADED, IT WILL HAVE THE PANEL PARAMETERS YOU HAVE SELECTED, IF THE PANEL WAS ACTIVATED!!; IE; UPDATED.

IF YOU HAVE EXTRA MEMORY IN RAM.1, YOU CAN HAVE NEW FILES AUTOMATICALLY SAVED TO THE EXTRA MEMORY, (WITHOUT HAVING TO TYPE :RAM.1 EACH TIME), IF YOU CHANGE :RAM.0 TO :RAM.1 IN THE FILER, (SELECT DEVICE) AND IN THE PANEL, AFTER Default device.

IGNORE DEFAULT DIRECTORY

♦J DOES NOT WORK FOR Timeout(minutes). YOU MUST CHOOSE A NUMBER BETWEEN 0 AND 99.

♦J DOES NOT WORK FOR Map size. YOU MUST CHOOSE A NUMBER BETWEEN 0 AND 255.

THE LAST COLUMN IN THE PANEL REFERS TO SERIAL PORT PARAMETERS.

MOST PRINTERS REQUIRE 9600 BAUD TO PRINT

OUR FAX/MODEM REQUIRES 2400 BAUD TO WORK

THE BAR-CODE READER SHOULD BE 9600, NONE, AND NO

WHEN USING THE Z-Z CABLE AND IMPORT - EXPORT, THE BAUD RATE SHOULD BE 1200 OR LESS TO MINIMIZE ERRORS. BOTH COMPUTERS SHOULD USE THE SAME PANEL.

SINCE IT IS POSSIBLE TO HAVE PANEL FILES, IT IS DESIREABLE TO SAVE PANEL FILES WITH NAMES FOR EACH DIFFERENT FUNCTION YOU USE; IE; FAX.PAN PRINTER.PAN Z-Z.PAN BAR-CODE.PAN ETC. SO THAT YOU DON'T HAVE TO REMEMBER WHAT VALUES TO CHANGE TO EACH TIME.

LOADING PIPEDREAM FILES FROM THE FILER

WHILE IN PIPEDREAM, IN THE FILES MENU, AND THE HI-LITE IS ON LOAD, AND YOU PRESS ENTER, THE NEW SCREEN ASKS YOU TO TYPE THE NAME OF THE FILE TO LOAD. THIS IS DIRECT LOADING. YOU CAN USE THE COMMAND BY ITSELF, IF YOU KNOW WHAT IT IS, WITHOUT HAVING TO LOOK IT UP IN THE MENU. ♦FL WILL GIVE THE SAME SCREEN MORE QUICKLY. YOU MUST NOW TYPE EXACTLY THE FILE NAME, OR ELSE IT WON'T LOAD.

CARAT LOADING IS WHEN INSTEAD OF TYPING THE FILE NAME, BECAUSE YOU CAN'T REMEMBER, PRESS ■F, MOVE ARROWS TO DIRECTORY AND FILE YOU WISH TO LOAD, AND PRESS TAB, WHICH WILL LEAVE A LITTLE MARKER NEXT OT THE FILE NAME, CALLED A CARAT. PRESS ESCAPE, AND THE LOAD SCREEN RE-APPEARS WITH THE MARKED FILE NAME TYPED IN FOR YOU, WITHOUT SPELLING ERRORS. PRESS ENTER TO LOAD FILE. THE OTHER LOADING OPTIONS WILL BE DISCUSSED ON P.XX.

1. TRY TO LOAD FROM EITHER DIRECT OR CARAT WHILE THE SCREEN IS IN OPTIONS, IT WILL NOT LOAD, AND RETURNS THE OPTIONS SCREEN
2. TRY TO LOAD FROM EITHER DIRECT OR CARAT WHILE INDEX HAS TOP LINE IN SUSPENDED ACTIVITIES HI-LIT; NEW FILE WILL KNOCK OUT HI-LIT FILE
3. TRY TO LOAD FROM EITHER DIRECT OR CARAT WHILE HILITE IS IN APPLICATIONS; NEW FILE WILL **NOT** KNOCK OUT ANY FILES.
4. TRY TO LOAD FROM EITHER DIRECT OR CARAT WHILE INDEX HAS A PIPEDREAM FILE HI-LIT ANYWHERE, IT WILL KNOCK OUT THAT HI-LIT FILE. GONE FOREVER, IF IT IS NOT PREVIOUSLY SAVED IN THE FILER.
5. TRY TO LOAD FROM EITHER DIRECT OR CARAT WHILE INDEX HAS A HI-LITE ON ANY NON-PD FILE; IT WILL KNOCK OUT THE HIGHEST PIPEDREAM FILE IN SUSPENDED ACTIVITIES, EVEN THOUGH SOME OTHER TYPE FILE IS HI-LIT.

---

AFTER 6 YEARS OF RESEARCH BY THE BEST COMPUTER BRAINS IN ENGLAND, USA, AND EUROPE, TRYING TO MAKE A BIGGER SCREEN OR MONITOR FOR THE Z88 .... A NON-COMPUTER TYPE PERSON WITH COMMON SENSE, PERSERVERANCE AND KNOWLEDGE OF WHAT A REAL TYPIST NEEDS TO LOOK AT WHILE TOUCH TYPING, HAS DEVISED THE BEST, MOST ECONOMICAL AND EASY SOLUTION.

MIKE FINK, THE PRESIDENT OF DOMINO CUBES, HAS CREATED THE ONLY 60 LINE MONITOR FOR PORTABLES. NOT ONLY CAN THE TYPIST SEE WHAT IS BEING TYPED ON THE PRINTERS' PAPER MONITOR, AS TYPING PROCEEDS, BUT A DUPLICATE FILE COPY IS BEING MADE AT THE SAME TIME, ALLOWING FOR EDITING AND MODIFYING. HERE IS HOW IT ALL WORKS;

1. FIRST, YOU EXECUTE THE FILE CALLED MONITOR.CLI THIS WILL PUT YOU IN THE TERMINAL SCREEN. CHOOSE CAPS LOCK OR NOT.
2. CONNECT THE PRINTER CABLE TO YOUR PRINTER, ON LINE.
3. START TYPING. AS YOU TYPE, THE OUTPUT GOES NOT ONLY TO THE PRINTER, BUT TO A FILE CALLED MONITOR.PD. WHEN YOU ARE DONE TYPING, YOU MUST END THE CLI BY PRESSING DIAMOND AND ESCAPE TOGETHER.
4. YOU MAY NOW LOAD THIS FILE AS PLAIN TEXT, THEN TYPE ■P AT THE TOP LINE AND SAVE AGAIN AS PLAIN TEXT.
5. ERASE ALL PIPEDREAM FILES FROM SUSPENDED ACTIVITIES AND EXECUTE THE FILE YOU JUST SAVED AS PLAIN TEXT. THIS WILL AUTOMATICALLY MAKE ALL THE NECESSARY CORRECTIONS EXCEPT REFORMATTING.
6. WHEN THE FILE STOPS, REFORMAT IT WITH DIAMOND R. YOU MAY NOW RENAME AND RESAVE IT AS A REGULAR FILE. (SEE TERMINAL.PD PAGE 44)

WHEN USING Select rows to print (FROM PRINT-OUT COMMANDS), IT OVERRIDES  
Wait between pages AND ◆EIP MARKER USED FOR END OF PAGE.

SEE: CAMBRIDGE MANUAL P.47,127

=====

Wait between pages PRINTING REQUIRES PL=66 OR NO.>0

=====

IF Page length IN OPTIONS = 0 THEN ◆EIP REQUIRES LINE SPACES  
 BETWEEN IT AND THE LAST LINE OF TEXT, SO THAT NEW INSERTED LINES FROM  
 SOME OTHER FILE WON'T SKIP INTO THE NEXT PAGE.

=====

◆EIP REQUIRES ◆Y SO NO SPACE EXISTS BETWEEN IT AND End of text

=====

TO PRINT MULTI PAGES, WHEN EACH PAGE IS NOT FULL, AND NOT WASTE PAPER,  
 SET PL=0 IN OPTIONS.. SET FIRST EIP = YES, AND CHOOSE SOME NUMBER MORE  
 THAN LAST ROW AND LESS THAN 58?

=====

TO REMOVE END COLUMNS, CURSOR MUST BE IN THAT COL. AS COLS ERASE. WHEN  
 THE LAST LEFT SCREEN COL ERASES, YOU MUST NOW TAB TO THE LAST  
 COL. TO CONTINUE ERASING, OTHERWISE YOU WILL ERASE THE FIRST COL.

=====

PLAIN TEXT FILES WHEN LOADED, WIND UP WITH THE DEFAULT OPTIONS PAGE.  
 IF YOU MODIFY THE OPTIONS PAGE, YOU CAN PRINT THE MODIFICATIONS, BUT  
 IF YOU SAVE AND LOAD IT; (AS PLAIN TEXT), IT WILL REVERT TO THE  
 DEFAULT, OR ORIGINAL CONDITION AGAIN.

=====

ELITE-10e; ADV.PED; PD-B.PD; FORM & INSTR

## PIPEDREAM-C

LIST FILES ARE WONDERFUL AND DANGEROUS!!

FIRST LETS DISCUSS HOW TO MAKE A LIST FILE.....

LET'S ASSUME YOU HAVE A FILE OF 10 DIFFERENT PAGES. YOU CAN MAKE ONE FILE OF 10 PAGES, BUT THEN YOU MUST USE THE SAME COLUMN WIDTHS FOR EACH PAGE PLUS THE LOADING AND SAVING TIME IS ABOUT 10 TIMES LONGER THAN THE SAME FILE AS A LIST FILE. A LIST FILE ALLOWS YOU TO HAVE DIFFERING COLUMNS, AND COLUMN WIDTHS PLUS THE LOADING, SAVING AND SWITCHING TIME IS ABOUT 1 TENTH THE TIME FOR A SINGLE TITLE FILE, AND IT TAKES UP .1 THE MEMORY SPACE!!

TO MAKE A LIST FILE, YOU START BY NAMING EACH PAGE WITH ITS OWN NAME, LATER, IF ANY OF THE NAMED FILES REQUIRES MORE THAN 1 PAGE, NO PROBLEM! IT DOESN'T AFFECT THE LIST FILE. EXAMPLE FOLLOWS:

### MAN-B.L

ALARM.PD  
BASIC.PD  
DISK-DR.PD  
FILER.PD  
IMP-EXP.PD  
MISC.PD  
PANEL.PD  
PD.PD  
PED.PD  
SPSH.PD  
TERMINAL.PD

A SAMPLE LIST FILE IS SHOWN AT THE LEFT OF THIS PARAGRAPH. THE FIRST LETTER OF THE FIRST TITLE MUST BE IN THE FIRST SPACE OF THE FIRST SLOT. DO NOT LEAVE ANY BLANK LINES ANYWHERE, ESPECIALLY NOT AT THE END OF THE LIST. WHEN FINISHED, YOU NOW MUST SAVE THIS FILE WITH A NAME THAT DOES NOT HAVE THE SAME SEQUENCE OF LETTERS IN ANY OF YOUR OTHER FILES, IN THAT DIRECTORY!!! AFTER CHOOSING THE NAME, ADD THE EXTENSION .L THEN SAVE AS PLAIN TEXT.

ALL PIPEDREAM FILES CAN BE LOADED FROM THE FILER BY MARKING THE FILE (SEE MY MANUAL-A P.2 ITEM 22) EXCEPT LIST FILES!!!! TO LOAD A LIST FILE, LEAVE THE EXT. .L OFF. JUST TYPE IN THE NAME YOU HAVE CHOSEN.

EASY...YOU WILL NOTICE, THAT EVEN THOUGH CAMBRIDGES' MANUAL SAYS NO PUNCTUATION MARKS ARE ALLOWED IN TITLES, YOU CAN SEE THAT THEY ARE WRONG. THE DASH, (-), IS THE ONLY NON-ALPHA-NUMERIC ALLOWED. I HAVE CHOSEN FOR MY EXAMPLE TITLE, MAN-B.L IF I HAVE ANY OTHER FILE BEGINNING WITH MAN-B, THEN, IF I WERE TO ATTEMPT TO LOAD THAT FILE, IT WOULD LOAD THE LIST FILE. THEN IF YOU ARE NOT CAREFUL, YOU SAVE THE WRONG FILE WITH THE WRONG NAME, AND REALLY SCREW THINGS UP. ALL OF THE FILE TITLES IN THE LIST FILE MUST BE IN THE FILER TO ALLOW THE LIST FILE TO WORK.

WHEN YOU LOAD THE LIST FILE IT ONLY LOADS THE FIRST TITLE; THEN YOU CAN ♦FN TO THE NEXT FILE, OR ♦FB TO THE BOTTOM FILE, OR ♦FP TO THE PREVIOUS FILE, OR ♦FT TO THE TOP FILE. IN EACH CASE AS SOON AS YOU LEAVE ONE FILE THE Z88 AUTOMATICALLY SAVES IT WITH ANY CHANGES OR ACCIDENTAL ERRORS YOU MADE. SEE P.111 CAMBRIDGE MANUAL

WHEN FIXING A ROW, (♦LFR), OR A COLUMN, (♦LFC), IN A LIST FILE, REMOVING THE MARKING FROM THE FILE YOU MARKED, REMOVES ONLY THAT FILE MARKING AND YOU ARE NOT AWARE THAT THE REST OF THE FILES RETAIN THE SAME MARKING EVEN THOUGH THE FIRST FIXING IS REMOVED. EACH FILE MUST BE REMOVED SEPARATELY.?

PICA-10e; adv.ped; PD-C.PD; FORM & INSTR

# THE FOLLOWING PROGRAMS ARE AVAILABLE FROM DOMINO CUBES

THE PRICES ARE VERY FLEXIBLE; BECAUSE YOU CAN BUY THE PROGRAM ON PAPER, OR ON DISK OR ON AN EPROM, AND IN EACH CASE THE PRICE WILL VARY. YOU MIGHT BE A PREFERRED CUSTOMER, OR ORDER ENOUGH PROGRAMS TO JUSTIFY A LOWER PRICE ..... YOU MIGHT HAVE A MODEM, AND RECEIVE THESE PROGRAMS OVER THE PHONE!! AGAIN A VARIABLE PRICE.

(SEE MAN.B-P.15) ..... SOME OF THESE PROGRAMS REQUIRE A SPECIAL PRINTER EDITOR TO HAVE IT PRINT PROPERLY ON PAPER. COP MEANS Cheaper On Paper

DOMINO CUBES HAS GIVEN OVER \$100 WORTH OF FREE PROGRAMS WITH THESE MANUALS

		MANUAL	
	T I T L E .....	D E S C R I P T I O N .....	PRICE
1	CHKBK-EX.SPS	RECONCILE MONTHLY BANK STATEMENTS	\$20
2	DUPE-SCORE.SPS	DUPLICATE SCORING FOR 8 TABLES (BRIDGE)	\$100
3	MONEY-TABLES	ANSWERS ALL QUESTIONS/\$\$/TIME/INTEREST	\$80
4	PATCH.BAS	BASIC-EDITING + GRAPHICS INCLUDES DOC.	\$40
42	MAIL-MERGE	PACKAGE OF PROGRAMS & INSTRUCTIONS	\$40

		MANUAL	
	T I T L E .....	M A T H E M A T I C S .....	PRICE
5	ALL-LOTTO.BAS	LOTTERY PROGRAM	\$7
6	BLAISE.BAS	BELL CURVE GENERATION EXAMPLE	\$20
7	DICE.BAS	RND SELECTION OF 36 TOSSES	\$5
8	DIOPH-X.MTH	ORIGINAL THEORUM BY MIKE FINK	\$50
9	ELLIPSE.MTH	ELLIPSE FORMULAE AND GRAPH	\$30
10	HEADS-TAILS.BAS	SEPARATE OR PART OF PROBABILITY (XX)	\$5
11	LTRY-5.BAS	LOTTERY PROGRAM	\$15
12	LTRY-6.BAS	LOTTERY PROGRAM	\$15
13	PASC-TRI.GR	GRAPHIC OF PASCALS TRIANGLE	\$10
14	PIGEON.BAS	PROBABILITY EXAMPLE	\$15
15	PRIMES-2BL.BAS	PRIME NO. TESTER/GENERATOR (BEST IN WORLD!!)	\$100
16	PROBABILTY.IIP	PROBABILITY LESSONS + DOC	\$100
17	QUAD-EQ.BAS	SOLVES QUADRATIC EQUATIONS	\$8
18	SEVEN-10.BAS	LOTTERY WIN-3 & WIN 4 RND SELECTIONS	FREE
32	CALC-1.SPS	EASY TO USE CALCULATING SHEET	\$4
36	HOW-2-BINARY.SPS	SHOWS HOW TO USE BINARY NUMBERS	\$5

		MANUAL	
	T I T L E .....	Z88 R E L A T E D .....	PRICE
19	ASCII-NOS.BAS	PRESS KEY SEE ASCII NO.	\$2
20	BASIC-EDIT.CLI	CREATES BASIC-EDIT.BAS	FREE
21	DISCMGR	SOFTWARE TO RUN DISK DRIVE (SEPARATE)	\$50
22	HEX-CODES.BAS	CHANGE DECIMAL TO HEX & VICE VERSA	\$3
23	K-SGN.CLI	REMOVES FILES FROM RAM.-	FREE
24	NEW-BASIC.BAS	TEMPLATE FOR YOUR NEW PROGRAM	\$6
4	PATCH.BAS	BASIC-EDITING + GRAPHICS INCLUDES DOC.	\$40
25	PAUSE-MERGE.BAS	ALLOWS PAUSE AND CONTINUE OF A PROGRAM	\$2
26	PRINT-CODES.BAS	CONTROL P.LAYOUT IN BASIC ADD DOC.	\$8
27	RESET.CLI	LIKE A SOFT RESET/BUT KEEPS SUSPENDED FILES	\$10
28	S-SGN.CLI	REMOVES FILES FROM RAM.-	FREE
29	SEARCH-REPLACE	HOW TO (PARTIAL LIST)	FREE
30	UNIVERSE ROM	SPELL-CHECKER,VT-100 & MORE	\$150
31	Z88-CHR-SET.BAS	Z88-CHR-SET	FREE

## THE FOLLOWING PROGRAMS ARE AVAILABLE FROM DOMINO CUBES

THE PRICES ARE VERY FLEXIBLE; BECAUSE YOU CAN BUY THE PROGRAM ON PAPER, OR ON DISK OR ON AN EPROM, AND IN EACH CASE THE PRICE WILL VARY. YOU MIGHT BE A PREFERRED CUSTOMER, OR ORDER ENOUGH PROGRAMS TO JUSTIFY A LOWER PRICE ..... YOU MIGHT HAVE A MODEM, AND RECEIVE THESE PROGRAMS OVER THE PHONE!! AGAIN A VARIABLE PRICE. (SEE MAN.B-P.15) ..... SOME OF THESE PROGRAMS REQUIRE A SPECIAL PRINTER EDITOR TO HAVE IT PRINT PROPERLY ON PAPER. COP MEANS Cheaper On Paper  
DOMINO CUBES HAS GIVEN OVER \$100 WORTH OF FREE PROGRAMS WITH THESE MANUALS

---

	<u>T I T L E</u> .....	<u>G R A P H I C S</u> .....	<u>MANUAL</u> <u>LOCATION</u>	<u>PRICE</u>
33	BAR-GRAPH.BAS	EXAMPLE-FOR PROGRAMMERS	.....	\$2
34	E-Z-GRAPH.BAS	MAKE GRAPHS EASY	COP.....	\$5
13	PASC-TRI.GR	GRAPHIC OF PASCALS TRIANGLE	COP.....	\$10
4	PATCH.BAS	BASIC-EDITING + GRAPHICS	.....	\$40
39	RND-SHAPES.BAS	REQUIRES PATCH.BAS TO BE IMPLEMENTED	(B).....	\$8
40	STAR.BAS	REQUIRES PATCH.BAS TO BE IMPLEMENTED	(B).....	\$8
41	HEXES.BAS	REQUIRES PATCH.BAS TO BE IMPLEMENTED	(B).....	\$8
4	PATCH.BAS	BASIC-EDITING + GRAPHICS	.....	\$40

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	<u>T I T L E</u> .....	<u>INTERNET-MODEMS-FAXES-BULLETIN BOARDS</u> .....	<u>MANUAL</u> <u>LOCATION</u>	<u>PRICE</u>
33	BAR-GRAPH.BAS	EXAMPLE-FOR PROGRAMMERS	.....	\$2
30	UNIVERSE ROM	SPELL-CHECKER VT-100 & MORE	ROM.....	\$150
35	Z88COM.BAS	EASE OF ACCESS TO BULLETIN BOARDS	A .....	\$30
38	PHONE.LOG	NEEDED WHEN USING 35 (COMES WITH 35)	.....	FREE

---

	<u>T I T L E</u> .....	<u>P R O G R A M M I N G - B A S I C</u> .....	<u>MANUAL</u> <u>LOCATION</u>	<u>PRICE</u>
20	BASIC-EDIT.CLI	CREATES BASIC-EDIT.BAS	B-8A	FREE
24	NEW-BASIC.BAS	TEMPLATE FOR YOUR NEW PROGRAM	COP.....	\$5
25	PAUSE-MERGE.BAS	ALLOWS PAUSE AND CONTINUE OF A PROGRAM	SEE 24..	\$2
37	P-ON.CLI	ALLOWS MACRO (CLI) PRINTING FROM BASIC	B-P.8C	

---

DOMINO CUBES HAS DESIGNED A HARNESS TO ALLOW JOURNALIST AND REPORTERS TO BE ABLE TO TAKE NOTES ANYWHERE, ANY TIME, WHILE STANDING, WITH NO ELECTRICITY, AND TYPING WITH 2 HANDS. YOU CAN ALSO SEND FAXES OR E-MAIL FROM THE SAME POSITION.

### MAIL MERGE REFERENCE MATERIAL:

SEE P.3 OF SLOT COMMANDS (AFTER MAN.B)  
SEE P.85,143,188 ALLEN  
SEE P.100, 261-270 Z88 MAGIC  
CAMBRIDGE MANUAL SHOWS NOTHING  
SEE P.8 MAN.A AND P.8 MAN.B FOR BOOKS AVAILABLE

IT IS POSSIBLE TO CREATE YOUR MAIL-MERGE YOURSELF, BUT IT IS DIFFICULT. YOU MIGHT CONSIDER BUYING THE MAIL-MERGE PROGRAMS SO THAT ALL THAT IS REQUIRED FROM YOU IS TO TYPE IN THE DATA YOU DESIRE.

E REQUIRES PROGRAM ..... TO BE IN FILER  
D REQUIRES PROGRAM ..... TO BE IN FILER  
C REQUIRES PROGRAM ..... TO BE IN FILER  
B REQUIRES PROGRAM PATCH.BAS..... TO BE IMPLEMENTED  
A REQUIRES PROGRAM PHONE.LOG TO BE IN FILER

TO INSERT A SPACE AT THE BEGINNING OF A COLUMN; GO TO THE BLOCKS MENU, THEN GO TO REPLACE ....

123	THESE NUMBERS ARE	STRING TO SEARCH FOR	^#	
456	IN SLOTS A6->A9	REPLACE WITH	^S^#1	
423		Search only col specified		Yes A
089		Do NOT ask for confirmation		

INCREASE COL. A WIDTH IF NECESSARY, AFTER SPACE INSERT WIDENS SLOT (the no. of characters inserted. here we are inserting one space.) EACH REPEAT INSERTS 1 MORE SPACE CHANGING THE 1 TO a 2 ERASES EVERYTHING

HERE IS AN EXAMPLE OF SPACE REMOVAL	TO DELETE THE SPACE AT THE BEGINNING OF A COLUMN; (first non-space character of each line is now first)
--	--

HERE IS AN EXAMPLE OF SPACE REMOVAL	STRING TO SEARCH FOR	^B^S	
	REPLACE WITH		<----- nothing
	Search only COL specified		
	Confirmation = No		
	Search only marked block		

HERE IS AN EXAMPLE OF SPACE REMOVAL	TO DELETE ALL SPACES IN EACH LINE; (MOVES ALL REMAINING NON-SPACE CHARACTERS TO THE LEFT)
--	--

HERE IS AN EXAMPLE OF SPACE REMOVAL	STRING TO SEARCH FOR	^S	
	REPLACE WITH		<----- nothing
	Search only COL specified		
	Confirmation = No		
	Search only marked block		

HERE IS A WAY TO REMOVE THE \$'S FROM A BUNCH OF SLOT REFERENCES ALL AT ONCE INSTEAD OF ONE AT A TIME. THERE ARE OTHER WAYS; SEE P.26A

G7	G7	G7	G7	G7	<-----ROW 1		
					ROW 2----->	G7	<--COL G
G7	G7	G7	G7	G7	<-----ROW 3		

COL COL COL COL COL	EACH OF THE 10 SLOTS IN THE UPPER LEFT
A B C D E	CONTAIN \$G\$2 .. SLOT G2 = G7 (TEXT)

SEE P.93 CAMBRIDGE MANUAL TO MODIFY STUFF IN EXPRESSION SLOTS.  
EXAMPLE:

STRING TO SEARCH FOR	^R#
REPLACE WITH	^RG2

THIS ACTION REPLACES EACH \$G\$2 WITH WHAT IS FOUND IN G2, WHICH IN THIS CASE IS G7,(TEXT). THIS EFFECTIVELY REMOVES THE \$ SIGNS FROM THE 10 EXPRESSION SLOTS. IF YOU HAD TO EDIT A 1000 SLOTS THIS IS QUICKER AND EASIER THAN ONE AT A TIME !!

## PED.PD

THESE PAGES DEPICT AND TRY TO EXPLAIN HOW TO USE THE PRINTER EDITOR FOR DIFFERENT PRINTERS AND FOR DIFFERENT PRINTING RESULTS FROM ANY SPECIFIC PRINTER! BY: **MIKE FINK** C JUN 1989

THERE ARE 4 COLUMNS ON PAGE 1 OF THE PRINTER EDITOR YOU GET. IT IS NAMED EPSON, AND IS DESIGNED WITH CODE NOS. THAT MAKE IT WORK NICE WITH WITH AN EPSON PRINTER.

THERE ARE 3 COLUMNS TO BE CONCERNED WITH ON PAGE 2 OF THE PRINTER EDITOR AS SUPPLIED. (BY DEFAULT).  
DEFAULT MEANS; THIS IS THE WAY IT STARTS AND IF YOU SCREW UP OR AROUND, YOU CAN RECALL THE ORIGINAL CONFIGURATION, BECAUSE WITH THIS COMPUTER, YOU CAN NEVER WORK WITH THE SAVED ORIGINAL. YOU ARE ALWAYS WORKING WITH THE SCREEN COPY OF THE ORIGINAL. (GOOD DESIGN)

YOU MAY, AND CAN, PUT IN DIFFERENT CODE NOS. TO SUIT YOUR PRINTER OR TO MODIFY AN EPSON PRINTER. EACH TIME YOU DEViate FROM THE ORIGINAL YOU MAY AND SHOULD, RENAME THE PED AND SAVE IT, SO IF YOU NEED IT YOU CAN RECALL IT FROM MEMORY BY LOADING IT. ONCE IT IS ON THE SCREEN, YOU MAY NOW, WITH OR WITHOUT FURTHER MODIFICATION, UPDATE(◆FU)IT, WHICH IS A NECESSARY SECOND STEP IF YOU WISH THE COMPUTER TO USE IT. IF YOU DO NOT RESAVE A MODIFIED PED, YOU WILL ALWAYS BE ABLE TO RECALL YOUR ORIGINAL. IF YOU RESAVE A MODIFIED PED, YOU WILL SUPERSEDE YOUR ORIGINAL, MAKING A NEW ORIGINAL. YOU MAY NAME, SAVE AND FILE AS MANY PED'S AS YOU WISH.

THE LETTERS OR NOS. THAT HAVE BEEN, OR SHOULD BE MODIFIED, WILL BE SHOWN UNDERLINED. THE CHARACTER SPACES AVAILABLE ON THE SCREEN FOR ANY GIVEN LINE NAME, ARE USUALLY MORE THAN IS EVIDENT ON THE PED SCREEN.

EXAMPLE: IF YOU MOVE THE CURSOR (ON PAGE 2) TO: Chr 163 Changes to; AND THEN MOVE THE CURSOR ON.. Changes to; THRU THE NOS., YOU WILL SEE THAT A WINDOW EXISTS, AND IT IS POSSIBLE TO PUT IN MORE CHARACTERS THAN THE WINDOW SUGGESTS!! ABOUT 250 IN EACH OF THE COLUMNS!?!?

SEE P.207 OF THE MANUAL.

WHEN USING THE C-130 PRINTER; IT IS POSSIBLE TO USE ONE 'ON' STRING TO ENCOMPASS 1,2,3,4,5,6,7,OR 8 OF THESE 8 SELECTED MODE CHOICES. OF COURSE, THE 'OFF' STRING MAY REQUIRE MODIFICATION.

(ESC, "!", n)

THIS STRING SHOULD BE INSERTED AT THE EXTENDED SEQUENCE ROW!

### EXAMPLE:

n=0.....PICA mode  
n=1.....ELITE mode  
n=4.....CONDENSED mode  
n=8.....EMPHASIZED (BOLD) mode  
n=16....DOUBLE STRIKE mode  
n=32....DOUBLE WIDTH mode  
n=64....ITALICS mode  
n=128...UNDERLINE mode

FOR ANY COMBINATION, JUST ADD THE VALUES OF n YOU WISH TO FUNCTION AT THE SAME TIME, (AS LONG AS NO CONFLICT OCCURS); AND USE THAT TOTAL AS THE THIRD NO. IN THE 'ON' STRING ie; 27,33,97.....  
27 is the ESC no.,33 is the code no. for ! (when using IBM chr.set 2) and 97 is the sum of elite, italics and double width.(ESC, "!", n)

## PED.PD

THIS IS THE PRINTER EDITOR THAT COMES WITH THE COMPUTER AND IS WHAT WHAT YOU GET WHEN YOU ENTER NEW FROM THE FILES MENU. TYPING ■E FROM ANYWHERE WILL ALSO PUT THE PED ON THE SCREEN.

### EPSON.PED

EXAMPLE: P.1 of 2

<u>COLUMN 1</u> 'ON' STRINGS	<u>COLUMN 2</u> 'OFF' STRINGS	<u>COLUMN 3</u> OFF AT END OF SLOT: Y OR N
1.UNDERLINE 27,45,1	27,45,0	Y
2.BOLD 27,69	27,70	Y
3.EXT.SEQUENCE *		Y
4.ITALICS 27,52	27,53	Y
5.SUBSCRIPT 27,83,1	27,84	Y
6.SUPERScript 27,83,0	27,84	N
7.ALTERNATE FONT 15	18	N
8.USER DEFINED 27,120,1 *	27,120,0	N

EPSON.PED PAGE 2

|---TRANSLATIONS---|

<u>COLUMN 1</u>	<u>COLUMN A</u>	<u>COLUMN B</u>	<u>COLUMN C</u>
1.PRINTER ON 27,64	CHR. NO. 163		
2.PRINTER OFF	CHANGES TO 27,82,3,35,27,82,0		
3.END OF PAGE 12	CHR. NO.		
4.ALLOW LINE FEED Y	CHANGES TO		
5.HMI: PREFIX	CHR. NO.		
6. SUFFIX	CHANGES TO		
7. OFFSET			
8.			

\*... NEITHER OF THESE OPTIONS ARE EXPLAINED IN CAMBRIDGES' MANUAL! BUT; THEY ARE EXPLAINED IN MIKE FINK'S INSTRUCTION MANUALS!!

WHEN USING THE DICONIX-150 PRINTER; IT IS POSSIBLE TO USE ONE 'ON' STRING TO ENCOMPASS 1,2,3,4,5 OR 6 OF THESE 6 SELECTED MODE CHOICES. AND OF COURSE, THE 'OFF' STRING IS REQ'D IF COLUMN 3 IS N.

NO MATTER WHAT YOU DO ON THE 150, IF THE CHR.SET DOES NOT HAVE ITALICS, YOU CAN'T GET ITALICS! NOT SO ON THE C-130.

### EXAMPLE:

n=0.....ELITE mode  
n=1.....PICA mode  
n=4.....CONDENSED mode  
n=8.....EMPHASIZED (BOLD) mode  
n=16....DOUBLE STRIKE mode  
n=32....DOUBLE WIDTH mode

((0 <= n <= 61))

FOR ANY COMBINATION, JUST ADD THE VALUES OF n YOU WISH TO FUNCTION AT THE SAME TIME, (AS LONG AS NO CONFLICT OCCURS); AND USE THAT TOTAL AS THE THIRD NO. IN THE 'ON' STRING ie; 27,33,52.....  
27 is the ESC no.,33 is the code no. for ! (when using IBM chr.set 2) and 52 is the sum of condensed, double strike and double width.  
(ESC, " ! " , n)

## PED.PD

THE **SCRIPT.PED** IS MODIFIED FOR THE DICONIX 150, A 3LB.PORTABLE PRINTER THAT HAS SCRIPT PRINTING.\* THE SCRIPT CODE 27,120,2 FROM PAGE 3-46 OF ITS MANUAL HAS BEEN INJECTED IN LINE NO. 3, AND ALSO 27,71 THE CODE FOR DOUBLE STRIKE. AT LINE 8, THE YES HAS BEEN CHANGED TO NO! 120 BECOMES 87 TO ALLOW DOUBLE WIDTH PRINTING. AT LINE 4, Y --> N.  
AT LINE 6, N --> Y.

### **SCRIPT.PED** EXAMPLE: P.1 of 2

<u>COLUMN 1</u>	<u>COLUMN 2</u>	<u>COLUMN 3</u>
'ON' STRINGS	'OFF' STRINGS	OFF AT END OF SLOT: Y OR N
1.UNDERLINE 27,45,1	27,45,0	Y
2.BOLD 27,69	27,70	Y
3.EXT.SEQUENCE <u>27,71,27,120,2</u>	<u>27,72,27,120,0</u>	N
4.ITALICS 27,52	27,53	N
5.SUBSCRIPT 27,83,1	27,84	Y
6.SUPERSCRIPT 27,83,0	27,84	Y
7.ALTERNATE FONT 15	18	N
8.USER DEFINED 27,87,1	27,87,0	N

TO ACCESS IBM CHR.SET 2, CHANGE 64 TO 54 AT LINE 1, (PAGE 1 of the PED)

TRANSLATIONS ARE AS FOLLOWS: 163-->156,= £    91--->5,= ♦    93--->6,= ♦  
64--->223,= ■    123--->3,= ♥    125--->4,= ♦

WHEN USING THE C-130 PRINTER, ALL SLIDE SWITCHES SHOULD BE OFF EXCEPT NOS. 3 and 8. ALL DIP SWITCHES TO BE AS SET BY FACTORY, i.e; ON. WHEN USING THE DICONIX 150, DIP SWITCH NO.6 SHOULD BE IN THE UP POSITION WHEN THE PRINTER IS IN ITS NORMAL POSITION.

THERE ARE NO ITALIC CHR'S IN THE IBM CHR. SET 2, AND IT IS NOT POSSIBLE TO PRINT ITALICS ON THE 150 WHEN IN THIS MODE, ALTHOUGH IT IS POSSIBLE ON THE C-130!! THE REASON THIS MODE WAS CHOSEN WAS TO ALLOW THE PRINTING OF ♣ ♠ ♥ & ♦ ON BOTH PRINTERS, AND ALLOW SCRIPT 2B USED AS WELL AS SERIFS ON THE 150. THE NEW 150+ DOES NOT HAVE SCRIPT BUT IT GOES FASTER.

### **SCRIPT.PED** PAGE 2

<u>COLUMN 1</u>		---TRANSLATIONS---		
		<u>COLUMN A</u>	<u>COLUMN B</u>	<u>COLUMN C</u>
1.PRINTER ON 27,54	CHR. NO.	<u>163</u>	<u>91</u>	<u>123</u>
2.PRINTER OFF	CHANGES TO	<u>156</u>	<u>5</u>	<u>3</u>
3.END OF PAGE 12	CHR. NO.	<u>64</u>	<u>93</u>	<u>125</u>
4.ALLOW LINE FEED Y	CHANGES TO	<u>223</u>	<u>6</u>	<u>4</u>
5.HMI: PREFIX	CHR. NO.			
6. SUFFIX	CHANGES TO			
7. OFFSET				
8.				

\*\*\*\*\*  
\* THE DICONIX 150 + DOES NOT HAVE SCRIPT!!  
\* THE DICONIX 150 DOES HAVE SCRIPT!!

## PED.PD

WHEN PRINTING ON PAPER FROM BASIC, THE FOLLOWING KEYBOARD CHARACTERS:  
[ # @ \$ ~ | ARE SOMETIMES NEEDED IN THE PROGRAM,  
THEREFORE THEY SHOULD NOT BE USED AS CHARACTERS TO BE TRANSLATED!!  
m=1 for the 150 printer and 0 for the C-130: n=your choice.

### BASIC.PED EXAMPLE: PAGE 1 of 2

<u>COLUMN 1</u>	<u>COLUMN 2</u>	<u>COLUMN 3</u>
'ON' STRINGS	'OFF' STRINGS	OFF AT END OF SLOT: Y OR N
1.UNDERLINE 27,45,1	27,45,0	Y
2.BOLD 27,69	27,70	Y
3.EXT.SEQUENCE 27,"!",n	27,"!",m	N
4.ITALICS 27,52	27,53	N
5.SUBSCRIPT 27,83,1	27,84	Y
6.SUPERSCRIP 27,83,0	27,84	Y
7.ALTERNATE FONT 15	18	N
8.USER DEFINED 27,87,1	27,87,0	N

### BASIC.PED PAGE 2

<u>COLUMN 1</u>		<u>CHR. NO.</u>	---TRANSLATIONS---
1.PRINTER ON 27,54			<u>COLUMN A</u> <u>COLUMN B</u> <u>COLUMN C</u>
2.PRINTER OFF		163	
3.END OF PAGE 12	CHANGES TO	27,82,3,35,27,82,0	
4.ALLOW LINE FEED Y	CHR. NO.		125
5.HMI: PREFIX	CHANGES TO		4
6. SUFFIX	CHR. NO.		
7. OFFSET	CHANGES TO		
8.			

=====

IF YOU ARE PRINTING A BASIC PROGRAM ON PAPER, YOU CAN CREATE MANY FONTS  
USING THE FOLLOWING INFORMATION:

SAMPLE PROGRAM:

```
100 P=OPENOUT":PRT.0"
120 PRINT#P,CHR$(5)+CHR$(91)
140 PRINT#P,CHR$(5)+CHR$(r): REM;FOR NORMAL PRINTING, OMIT LINES 140 AND
150 REM: r IS DETERMINED BY TABLE 2; FOLLOWING THIS PROGRAM
160 PRINT#P,"IF THE PROGRAM IS TEXT THEN IT GOES HERE"
165 IF PROGRAM GENERATES A PRINT COMMAND YOU FORGET LINE 160
170 REM: REPEAT LINE 140 AT LINE 180 TO CANCEL r
180 PRINT#P,CHR$(5)+CHR$(r)
200 PRINT#P,CHR$(5)+CHR$(93)
>RUN now press square + P, then ENTER
```

=====

**TABLE 2**

a, r	a, r
PRINTER ON 5, 91	PRINTER OFF 5, 93
UNDERLINE 5, 85	SUBSCRIPT 5, 76
BOLD 5, 66	SUPERSCRIP 5, 83
EXT'D SEQ. 5, 88	CONDENSED 5, 65
ITALICS 5, 73	USER DEF'D 5, 69

=====

if r is 88, then the total of the n's  
chosen from table 1 must be entered at  
col.1, page 12, line 3.

**TABLE 1**

n	see EXAMPLES pages 1-2
0	= pica A VALUE FOR
1	= elite n <u>MUST</u>
4	= condensed REPLACE n IN
8	= bold LINE 3,
16	= double strike FOR <u>ANY</u> m!
32	= double width
64	= italics
128	= underline

THE PURPOSE FOR DX-3.PED IS, TO ALLOW FAST DRAFT PRINTING- WHEN USING THE DICONIX PRINTER, AND WHEN THE DOCUMENT IS READY FOR FINAL PRINTING, TO USE DOUBLE STRIKE TO DARKEN THE LETTERS; IE; **◆PX 27,71**

DOUBLE STRIKE OF COURSE TAKES TWICE AS LONG AS DRAFT. YOU COULD USE BOLD BUT THEN IF IN YOUR DOCUMENT, IF YOU WISH CONTRAST WITH NORMAL AND BOLD, IT WOULD NOT BE POSSIBLE.

### DX-3.PED EXAMPLE: P.1 of 2

<u>COLUMN 1</u> 'ON' STRINGS	<u>COLUMN 2</u> 'OFF' STRINGS	<u>COLUMN 3</u> OFF AT END OF SLOT: Y OR N
1.UNDERLINE 27,45,1	27,45,0	Y
2.BOLD 27,69	27,70	Y
3.EXT.SEQUENCE 27,71	27,72	N
4.ITALICS 27,52	27,53 not possible	N
5.SUBSCRIPT 27,83,1	27,84	Y
6.SUPERScript 27,83,0	27,84	Y
7.ALTERNATE FONT 15	18	N
8.USER DEFINED 27,87,1	27,87,0	N

### DX-3.PED PAGE 2

<u>COLUMN 1</u>		---TRANSLATIONS---		
		<u>COLUMN A</u>	<u>COLUMN B</u>	<u>COLUMN C</u>
1.PRINTER ON 27,54	CHR. NO.	163	91	123
2.PRINTER OFF	CHANGES TO	156	5	3
3.END OF PAGE 12	CHR. NO.	*64	93	125
4.ALLOW LINE FEED Y	CHANGES TO	223	6	4
5.HMI: PREFIX	CHR. NO.			
6. SUFFIX	CHANGES TO			
7. OFFSET				
8.				

=====

\* 64 = the 'at' symbol

## PED. PD

THE PURPOSE FOR PROP.PED IS TO ALLOW PROPRTIONAL SPACING. WHEN PROP. SPACING IS USED (27,112,1), IT KILLS JUSTIFICATION.

### PROP. PED EXAMPLE: P.1 of 2

<u>COLUMN 1</u> 'ON' STRINGS	<u>COLUMN 2</u> 'OFF' STRINGS	<u>COLUMN 3</u> OFF AT END OF SLOT: Y OR N
1.UNDERLINE 27,45,1	27,45,0	Y
2.BOLD 27,69	27,70	N
3.EXT.SEQUENCE 27,112,1	27,112,0	N
4.ITALICS 27,52	27,53	Y
5.SUBSCRIPT 27,83,1	27,84	Y
6.SUPERSCRIPT 27,83,0	27,84	Y
7.ALTERNATE FONT 15	18	N
8.USER DEFINED 27,87,1	27,87,0	N

### PROP. PED PAGE 2

<u>COLUMN 1</u>		---TRANSLATIONS---		
		<u>COLUMN A</u>	<u>COLUMN B</u>	<u>COLUMN C</u>
1.PRINTER ON 27,54	CHR. NO.	163	91	123
2.PRINTER OFF	CHANGES TO	156	5	3
3.END OF PAGE 12	CHR. NO.	64	93	125
4.ALLOW LINE FEED Y	CHANGES TO	223	6	4
5.HMI: PREFIX	CHR. NO.			
6. SUFFIX	CHANGES TO			
7. OFFSET				
8.				

=====

EXTENDED SEQUENCE, BY ITS NAME, IS THE ONLY PLACE MORE THAN ONE STRING OF COMMANDS MAY GO.

=====

#### FOR THE C-130

n = sum of choices  
off=m=0

#### CHOICES

0....PICA mode  
1....ELITE mode  
4....CONDENSED mode  
8....EMPHASIZED (BOLD) mode  
16...DOUBLE STRIKE mode  
32...DOUBLE WIDTH mode  
64...ITALICS mode  
128..UNDERLINE MODE  
253

#### FOR THE 150

n = sum of choices  
off=m=1

#### CHOICES

0....ELITE mode  
1....PICA mode  
4....CONDENSED mode  
8....EMPHASIZED (BOLD) mode  
16...DOUBLE STRIKE mode  
32...DOUBLE WIDTH mode  
61

## PED.PD

THE ELITE-DW.PED, IS TO ALLOW DOUBLE WIDTH PRINTING TO TAKE UP LESS WIDTH DUE TO THE ELITE COMBINING. THIS GIVES YOU 48 CHARACTERS PER LINE INSTEAD OF 40.

### ELITE-DW.PED EXAMPLE: P.1 of 2

<u>COLUMN 1</u> 'ON' STRINGS	<u>COLUMN 2</u> 'OFF' STRINGS	<u>COLUMN 3</u> OFF AT END OF SLOT: Y OR N
1.UNDERLINE 27,45,1	27,45,0	Y
2.BOLD 27,69	27,70	N
3.EXT.SEQUENCE 27,"!",n	27,"!",m	N
4.ITALICS 27,52	27,53	Y
5.SUBSCRIPT 27,83,1	27,84	Y
6.SUPERScript 27,83,0	27,84	Y
7.ALTERNATE FONT 15	18	N
8.USER DEFINED 27,87,1	27,87,0	N

### ELITE-DW.PED PAGE 2

<u>COLUMN 1</u>		---TRANSLATIONS---		
		<u>COLUMN A</u>	<u>COLUMN B</u>	<u>COLUMN C</u>
1.PRINTER ON 27,54	CHR. NO.	163	91	123
2.PRINTER OFF	CHANGES TO	156	5	3
3.END OF PAGE 12	CHR. NO.	64	93	125
4.ALLOW LINE FEED Y	CHANGES TO	223	6	4
5.HMI: PREFIX	CHR. NO.			
6. SUFFIX	CHANGES TO			
7. OFFSET				
8.				

#### FOR THE C-130

n = sum of choices  
off=m=0

#### CHOICES

0....PICA mode  
1....ELITE mode  
4....CONDENSED mode  
8....EMPHASIZED (BOLD) mode  
16...DOUBLE STRIKE mode  
32...DOUBLE WIDTH mode  
64...ITALICS mode  
128..UNDERLINE MODE  
253

#### FOR THE 150

n = sum of choices  
off=m=1

#### CHOICES

0....ELITE mode  
1....PICA mode  
4....CONDENSED mode  
8....EMPHASIZED (BOLD) mode  
16...DOUBLE STRIKE mode  
32...DOUBLE WIDTH mode  
61

## PED.PD

THE ELITE.PED IS TO ALLOW CHANGING PICA WIDTH TO ELITE WIDTH WHICH ALLOWS 96 CHARACTERS PER LINE INSTEAD OF 80 - on normal printers: On the DICONIX-150 you get 12 chr's/inch or 85 chr's/line.

### ELITE.PED EXAMPLE: PAGE 1 of 2

<u>COLUMN 1</u> 'ON' STRINGS	<u>COLUMN 2</u> 'OFF' STRINGS	<u>COLUMN 3</u> OFF AT END OF SLOT: Y OR N
1.UNDERLINE 27,45,1	27,45,0	Y
2.BOLD 27,69	27,70	N
3.EXT.SEQUENCE 27,"!",n	27,"!",m	N
4.ITALICS 27,52	27,53	Y
5.SUBSCRIPT 27,83,1	27,84	Y
6.SUPERSCRIPT 27,83,0	27,84	Y
7.ALTERNATE FONT 15	18	N
8.USER DEFINED 27,87,1	27,87,0	N

### ELITE.PED PAGE 2

<u>COLUMN 1</u>		---TRANSLATIONS---		
		<u>COLUMN A</u>	<u>COLUMN B</u>	<u>COLUMN C</u>
1.PRINTER ON 27,54	CHR. NO.	163	91	123
2.PRINTER OFF	CHANGES TO	156	5	3
3.END OF PAGE 12	CHR. NO.	64	93	125
4.ALLOW LINE FEED Y	CHANGES TO	223	6	4
5.HMI: PREFIX	CHR. NO.			
6. SUFFIX	CHANGES TO			
7. OFFSET				
8.				

#### FOR THE C-130

n = sum of choices  
off=m=0

#### CHOICES

0....PICA mode  
1....ELITE mode  
4....CONDENSED mode  
8....EMPHASIZED (BOLD) mode  
16...DOUBLE STRIKE mode  
32...DOUBLE WIDTH mode  
64...ITALICS mode  
128..UNDERLINE MODE  
253

#### FOR THE 150

n = sum of choices  
off=m=1

#### CHOICES

0....ELITE mode  
1....PICA mode  
4....CONDENSED mode  
8....EMPHASIZED (BOLD) mode  
16...DOUBLE STRIKE mode  
32...DOUBLE WIDTH mode  
61

THESE SYMBOLS SHOWN BELOW MUST BE PAPER PRINTED WITH A PRINTER EDITOR THAT PRINTS THE KEY, UNTRANSLATED!! ie: **CLI.PED**

1	2	3	1 = @	2 = _	3 = ^	@	_	^
4		5	4 =		5 =			
6	7	8	6 = <	7 = _	8 = >	<	_	>

=====

TO SEE WHAT THE TRANSLATED CHARACTERS LOOK LIKE YOU MUST NOW USE THE **BOXES.PED** (block mark to here first-then switch ped's)

1	2	3	1 = [	2 = _	3 = ]	[	_	]
4		5	4 = [		5 = ]	[		]
6	7	8	6 = [	7 = _	8 = ]	[	_	]

TO DRAW A SAMPLE BOX ON THE PRINTER, BLOCK MARK THE BOX BELOW:  
USING THE **BOXES.PED**



OBVIOUSLY, YOU CAN PRINT  
I  
N ANY BOX !  
S  
I  
D  
E

THIS PAGE SHOULD BE LOOKED AT WHILE READING THE PED PART OF MANUAL B

THE BOXES CAN BE MADE WITH DOUBLE LINE FRAMES AS WELL AS SINGLE LINE FRAMES - CHECK YOUR PRINTER AND ITS ASCI CODES.....

COURTESY OF MIKE FINK

**BOXES&CLI.PED; BOXES.GR; GRAPHICS & FORM**

## PED. PD

THE PURPOSE FOR THE BOXES. PED IS TO ALLOW NEAT BOX MAKING. THE NO. OF TRANSLATIONS ON THIS MODEL Z-88 IS ONLY 9. THERE ARE LATER MODELS THAT ALLOW MORE ROOM FOR MORE TRANSLATIONS..(28). ON THE 9 MODEL THERE IS ROOM FOR TWO MORE AFTER THE BOX TRANSLATIONS; I SHALL USE THE DIAMOND AND THE SQUARE. YOU OF COURSE, CAN TRANSLATE ANYTHING YOU WISH.

### BOXES. PED EXAMPLE: PAGE 1 of 2

<u>COLUMN 1</u> 'ON' STRINGS	<u>COLUMN 2</u> 'OFF' STRINGS	<u>COLUMN 3</u> OFF AT END OF SLOT: Y OR N
1. UNDERLINE 27,45,1	27,45,0	Y
2. BOLD 27,69	27,70	N
3. EXT. SEQUENCE 27,"!",n	27,"!",m	N
4. ITALICS 27,52	27,53	Y
5. SUBSCRIPT 27,83,1	27,84	Y
6. SUPERScript 27,83,0	27,84	Y
7. ALTERNATE FONT 15	18	N
8. USER DEFINED 27,87,1	27,87,0	N

### BOXES. PED PAGE 2

<u>COLUMN 1</u>		---TRANSLATIONS---		
		<u>COLUMN A</u>	<u>COLUMN B</u>	<u>COLUMN C</u>
1. PRINTER ON 27,54	CHR. NO.	"#"	93	"--"
2. PRINTER OFF	CHANGES TO	223	4	254
3. END OF PAGE 12	CHR. NO.	64	95	94
4. ALLOW LINE FEED Y	CHANGES TO	218	196	191
5. HMI: PREFIX	CHR. NO.	60	124	62
6. SUFFIX	CHANGES TO	192	179	217
7. OFFSET				
8.				

#### FOR THE C-130

n = sum of choices  
off=m=0

#### CHOICES

0....PICA mode  
1....ELITE mode  
4....CONDENSED mode  
8....EMPHASIZED (BOLD) mode  
16...DOUBLE STRIKE mode  
32...DOUBLE WIDTH mode  
64...ITALICS mode  
128..UNDERLINE MODE  
253

#### FOR THE 150

n = sum of choices  
off=m=1

#### CHOICES

0....ELITE mode  
1....PICA mode  
4....CONDENSED mode  
8....EMPHASIZED (BOLD) mode  
16...DOUBLE STRIKE mode  
32...DOUBLE WIDTH mode  
61

SEE PAGE WITH BOXES --BOXES.GR

## PED.PD

THE PURPOSE FOR THE **CLI.PED** IS TO ALLOW ALL KEYBOARD CHARACTERS TO BE WHAT THEY ARE WITHOUT TRANSLATION, BUT STILL USING THE IBM CHR. SET 2. TO USE THE EPSON CHR.SET, JUST USE THE EPSON.PED

### **CLI.PED** EXAMPLE: PAGE 1 of 2

<u>COLUMN 1</u> 'ON' STRINGS	<u>COLUMN 2</u> 'OFF' STRINGS	<u>COLUMN 3</u> OFF AT END OF SLOT: Y OR N
1.UNDERLINE 27,45,1	27,45,0	Y
2.BOLD 27,69	27,70	Y
3.EXT.SEQUENCE		Y
4.ITALICS 27,52	27,53	Y
5.SUBSCRIPT 27,83,1	27,84	Y
6.SUPERSCRIPT 27,83,0	27,84	N
7.ALTERNATE FONT 15	18	N
8.USER DEFINED 27,87,1	27,87,0	N

### **CLI.PED** PAGE 2

<u>COLUMN 1</u>		---TRANSLATIONS---		
		<u>COLUMN A</u>	<u>COLUMN B</u>	<u>COLUMN C</u>
1.PRINTER ON 27,54	CHR. NO.	163		
2.PRINTER OFF	CHANGES TO	27,82,3,35,27,82,0		
3.END OF PAGE 12	CHR. NO.			
4.ALLOW LINE FEED Y	CHANGES TO			
5.HMI: PREFIX	CHR. NO.			
6. SUFFIX	CHANGES TO			
7. OFFSET				
8.				

THE GRAPHICS. PED IS TO ALLOW A BASIC PROGRAM TO EASILY CHOOSE GRAPHICS SYMBOLS RANDOMLY IN A RANGE OF 9 CONSECUTIVE NOS.

GRAPHICS. PED EXAMPLE: PAGE 1 of 2

<u>COLUMN 1</u> 'ON' STRINGS	<u>COLUMN 2</u> 'OFF' STRINGS	<u>COLUMN 3</u> OFF AT END OF SLOT: Y OR N
1. UNDERLINE 27,45,1	27,45,0	Y
2. BOLD 27,69	27,70	N
3. EXT. SEQUENCE 27,"!",n	27,"!",m	N
4. ITALICS 27,52	27,53	Y
5. SUBSCRIPT 27,83,1	27,84	Y
6. SUPERSCRIPT 27,83,0	27,84	Y
7. ALTERNATE FONT 15	18	N
8. USER DEFINED 27,87,1	27,87,0	N

GRAPHICS. PED PAGE 2

<u>COLUMN 1</u>		---TRANSLATIONS---
		<u>COLUMN A</u> <u>COLUMN B</u> <u>COLUMN C</u>
1. PRINTER ON 27,54	CHR. NO.	32      33      34
2. PRINTER OFF	CHANGES TO	219      220      221
3. END OF PAGE 12	CHR. NO.	35      36      37
4. ALLOW LINE FEED Y	CHANGES TO	176      223      222
5. HMI: PREFIX	CHR. NO.	38      39      40
6. SUFFIX	CHANGES TO	32      177      178
7. OFFSET		
8.		

FOR THE C-130

n = sum of choices  
off=m=0

CHOICES

0....PICA mode  
1....ELITE mode  
4....CONDENSED mode  
8....EMPHASIZED (BOLD) mode  
16...DOUBLE STRIKE mode  
32...DOUBLE WIDTH mode  
64...ITALICS mode  
128..UNDERLINE MODE  
253

FOR THE 150

n = sum of choices  
off=m=1

CHOICES

0....ELITE mode  
1....PICA mode  
4....CONDENSED mode  
8....EMPHASIZED (BOLD) mode  
16...DOUBLE STRIKE mode  
32...DOUBLE WIDTH mode  
61

THE Z88'S FIRST COLUMN IS 'A', AND CONTINUES FOR 8 THOUSAND MORE COLUMNS. THE FIRST ROW IS 'ONE', AND DEPENDING ON YOUR MEMORY CONTINUES UP TO 65536.

IF YOU CHOOSE A COLUMN AND A ROW, YOU HAVE CHOSEN A 'CELL', OR 'SLOT'.

THE LETTER AND NUMBER IMMEDIATELY FOLLOWING THE UNDERLINED WORD PIPEDREAM, IN THE UPPER LEFT SCREEN, IS THE INDICATION OF THE CELL, or SLOT THAT YOUR CURSOR IS IN.

IF YOU NOW PRESS  $\blacklozenge$ X, THE SLOT YOU ARE IN WILL DARKEN AND THE CURSOR WILL APPEAR IN THE MIDDLE OF THE TOP LINE OF THE SCREEN, REQUESTING THAT YOU TYPE LETTERS, (STRINGS), IN QUOTES; OR ANY TYPE OF MATHEMATICAL EXPRESSIONS IN THE WHOLE WIDE WORLD, (WITHOUT QUOTES), THAT YOU WISH. THE NUMBER OF LEFT AND RIGHT PARENTHESES MUST BE EQUAL. WHEN YOU THEN PRESS 'ENTER', THE RESULT OF THE EXPRESSION WILL BE IN THE CELL YOU STARTED IN.

FOR EXAMPLE:  $(6^3)-17+B3*PI = 271.26$  IF  $B3 = 23$

IF YOU DO NOTHING, THE OPTIONS PAGE WILL GIVE YOU 2 DECIMAL PLACES FOR THE WHOLE FILE. YOU CAN CHANGE THE DECIMAL PLACES IN THE OPTIONS PAGE TO ANYTHING YOU DESIRE. YOU CAN ALSO MODIFY ANY INDIVIDUAL SLOT TO HAVE DIFFERING DECIMAL PLACES BY USING THE LAYOUT MENU.

IF YOU WISH TO MODIFY, EDIT, OR DELETE AN EXPRESSION THAT YOU PUT IN A CELL, YOU GO TO THAT CELL. IF IT IS FAR AWAY, YOU CAN USE  $\blacklozenge$ CGS, THIS WILL IMMEDIATELY PUT YOUR CURSOR IN THE CELL YOU ASKED FOR.

YOUR OLD EXPRESSION WILL APPEAR AT THE TOP LEFT HALF OF THE SCREEN, AND YOU CAN TYPE A NEW EXPRESSION IN THE TOP MIDDLE WHERE THE CURSOR IS. PRESSING ENTER WILL DISPLAY THE NEW EXPRESSION WHERE THE OLD ONE WAS, AND THE RESULT WILL BE DISPLAYED IN THE SLOT.

IF YOU PRESS  $\blacklozenge$ X, THE EXPRESSION WILL JUMP UP TO THE TOP MIDDLE FOR EDITING. THE TOP LEFT WILL SHOW AS MUCH OF THE EXPRESSION AS FITS IN THAT HALF OF THE SCREEN. THE MIDDLE WILL ALSO SHOW AS MUCH OF THE EXPRESSION AS FITS IN THE RIGHT HALF OF THE SCREEN, BUT YOU CAN SCROLL THIS HALF UP TO ABOUT 256 CHARACTERS.

IF YOU WISH TO DELETE THE EXPRESSION, THERE ARE SEVERAL WAYS YOU CAN DO THIS:

1. IF THE EXPRESSION IS AT THE TOP OF THE SCREEN, AND THE CURSOR IS AT THE BEGINNING, YOU CAN USE  $\blacklozenge$ D.
2. IF THE CURSOR IS IN THE SLOT, YOU CAN PRESS THE SPACE BAR AND ENTER.
3. IF THE EXPRESSION IS AT THE TOP OF THE SCREEN, AND THE CURSOR IS AT THE BEGINNING, YOU CAN USE  $\blacklozenge$ T REPEATING.
4. IF THE EXPRESSION IS AT THE TOP OF THE SCREEN, AND THE CURSOR IS AT THE BEGINNING, YOU CAN USE  $\blacklozenge$  RIGHT ARROW TO JUMP TO THE END OF THE EXPRESSION, THEN USE DELETE - REPEAT.
5. IF THE EXPRESSION IS AT THE TOP OF THE SCREEN, AND THE CURSOR IS AT THE BEGINNING, YOU CAN ARROW OVER TO WHERE YOU WISH AND DELETE WITH  $\blacklozenge$ G OR THE DELETE KEY.

.....WAYS TO COPY THINGS FROM SLOTS.....B.....C.....	COLUMN B	COL.C	OPERATION DESCRIPTION
ARBITRARY TEXT OR NOS. IN SLOT C4 ----->	ANY	WORDS	A
TYPE INDEX(3,4) IN EXPRESSION SLOT C5	ANY	WORDS	B
TYPE @ before & after C4 IN TEXT SLOT C6	ANY	WORDS	C
◆ BRE - C4 to C7	ANY	WORDS	D
◆ Z - C4 to C8	ANY	WORDS	E

IF YOU TYPE CHARACTERS INTO A TEXT SLOT, LEFT JUSTIFIED, THE FOLLOWING OPERATIONS EACH HAVE THEIR OWN WAY OF COPYING THE TEXT. IF THE SLOT WERE AN EXPRESSION SLOT, THE RESULTS WOULD BE A LITTLE DIFFERENT. I WILL GO THRU EACH TYPE OF OPERATION WITH AN EXPLANATION SO THAT EVENTUALLY YOU WILL KNOW WHICH OPERATION IS REQUIRED FOR THE END YOU DESIRE.

OPERATION A: TYPE ANY CHARACTERS IN TEXT SLOT (C4)

OPERATION B:

IF YOU NOW MAKE C5 AN EXPRESSION SLOT AND TYPE INDEX(3,4), C5 WILL CONTAIN THE TEXT FROM C4, BUT IT WILL BE RIGHT JUSTIFIED.

OPERATION C: TYPE @ BEFORE AND AFTER C4 IN TEXT SLOT C6, AND IT TOO WILL CONTAIN THE TEXT FROM C4 BUT LEFT JUSTIFIED.

OPERATION D: TYPE DIAMOND BRE, C4 -->C7 AND C7 WILL CONTAIN THE TEXT FROM C4 LEFT JUSTIFIED AND WILL NOT PUSH DOWN ANY DATA IN COLUMN C, IF THERE WAS DATA BELOW IN COLUMN C.

OPERATION E: USE DIAMOND Z, TO COPY C4 TO C8. C8 WILL CONTAIN THE TEXT FROM C4 ALSO LEFT JUSTIFIED, BUT IT WILL PUSH DOWN ANYTHING BELOW IN COLUMN C THE SAME NUMBER OF ROWS THAT ◆ Z TOOK UP.

THIS KNOWLEDGE IS IMPORTANT TO ALLOW YOU TO CREATE FORMS AND FORMATTING WITH EASE, SO THAT ROWS AND COLUMNS DON'T GET SCREWED UP!!

SPSH-2.PD

ELITE-10e; SPSH-2.PD USE SPS.PED; MAN & SPS

### SPSH-3.PD

examples of how to use the spreadsheet functions by MIKE FINK (C)1989

- A. HERE ARE 2 VARIABLES TO BE IMMEDIATELY CONCERNED WITH WHEN USING LOG FUNCTIONS THEY ARE:  
1. X                      2. n
- B. FIRST CHOOSE VALUES FOR X AND n, AND INSERT X AT A19, AND n AT C19.
- C. ALL THE VALUES FOR THE EQUATIONS SHOWN WILL AUTOMATICALLY OCCUR.
- D. EACH TIME YOU CHANGE X AND/OR n, NEW VALUES OCCUR.
- E. INDEX(COL,ROW) REQUIRES VALUES FOR COLUMN AND ROW TO BE NOS.! NOT LETTERS, AND RETURNS THE VALUE AT THAT COL,ROW; IN NOS. OR TEXT.
- F. THE MAXIMUM NO. ALLOWED FOR COL. IS 31,872; ROW=65,535
- G. I DON'T THINK THE COLUMN ALPHABET GOES PAST ZZ, WHICH WOULD BE 26+26<sup>2</sup>, OR 702 COLUMNS. THE MAXIMUM ROW NO. IS PROBABLY A FUNCTION OF YOUR MEMORY, NOT TO EXCEED 65,535 ROWS!! THE MANUAL IMPLIES THAT THE SPREADSHEET COLUMN LIMIT IS 42 ??

0.00	=X=A19	n=C19=	0.00
EXP(EXP(n))	2.718281829	n=	0.00
EXP(n)	1.000000000	n=	0.00
LN(n)	IMPOSSIBLE	n=	0.00
LOG(n)	IMPOSSIBLE	n=	0.00
X^n	SPECIAL	X=	0.00

TO SEE THE SLOT INPUT YOU CAN TYPE  $\blacklozenge$ ENT AND SCREEN SLOT VALUES WILL BE TRADED WITH EXPRESSION SLOT INPUT. THIS ALLOWS YOU TO PRINT YOUR COMPLICATED FORMULAE ON THE SCREEN AND THEREFORE ON PAPER. SEE P.106

=====

THIS FILE SHOULD BE ON AN EPROM OR A DISK, BUT SINCE THE CUSTOMER HAS NO DISK DRIVE, AND DID NOT ORDER AN EPROM, THE USER HAS TO FILL IN THE EXPRESSION SLOTS AS SHOWN NEXT:

A19 = 0	B19 = "X=A19	n=C19="	(LEFT ALIGN) $\blacklozenge$ LAL
A20 = "EXP(EXP(n))"	B20 = EXP(EXP(C19))	C20 = "n="	D20= \$C\$19
A21 = "EXP(n)"	B21 = EXP(EXP(C19))	C21 = "n="	D21= \$C\$19
A22 = "LN(n)"	B22 = IF(C19<=0,"IMPOSSIBLE",LN(C19))	C22 = "n="	D22= \$C\$19
A23 = "LOG(n)"	B23 = IF(C19<=0,"IMPOSSIBLE",LOG(C19))	C23 = "n="	D23= \$C\$19
A24 = "X^n"	B24 = IF(A19=0,"SPECIAL",A19^C19)	C24 = "X="	D24= A19

ROW	column B	column C	column D	column E
4	2.00	0.00	0.00	
5	CONSTANT B			
6		-1.00		-2.00
		VARIABLE A		RESULT A*B

IN ORDER TO MAKE THE SPREADSHEET ACCEPT VARIABLES, THE FOLLOWING METHODS ARE APPLIED AS DEVISED AND INVENTED BY MIKE FINK: (C) 1990

SLOT B4 CONTAINS A CONSTANT - (B) AS DOES D4,  
 C4= SUM OF D4+ITSELF! (C4+D4)= THE EXPRESSION IN C4  
 D4=0 TO START WITH- YOU CHANGE IT WHEN YOU BEGIN  
 C6 IS THE VALUE OF THE VARIABLE "A" = C4-1  
 E6=C6\*B4 OR ANY OTHER MATH RELATIONSHIP YOU CHOOSE

IT IS NOW POSSIBLE WITH THIS PROCEDURE, (IF YOUR STARTING POINTS HAVE BEEN SET PROPERLY) TO HAVE A CLI ACT UPON THE FILE AS THOUGH IT WERE A PROGRAM IN BASIC!!!!!!  
 OR - YOU CAN MANUALLY GO FORWARD OR BACKWARDS.

TO START THIS SIMPLE EXAMPLE, CHANGE D4=0 TO D4=1 THEN ♦A

B4=2  
 C4=1=C4+D4  
 D4=0  
 C6=0=C4-1  
 E6=0=C6\*B4

MAKE SURE YOU DO NOT ALTER THE EXPRESSIONS IN THE EXPRESSION SLOTS !

PRESS ♦A TO START CALC'S .....  
 CHANGE D4 TO -1 FOR BACKWARDS OR TO RESET TO THE BEGINNINGS

IF YOU HOLD DOWN A KEY, IT WILL REPEAT AT THE RATE SET IN THE PANEL.

YOU CAN ALTER THE CCNSTANTS AND THE MATH EXPRESSIONS TO CREATE A SEQUENTIAL COMPUTER CALCULATOR TO SUIT YOUR NEEDS, EASIER THAN WRITING THE PROGRAM IN BASIC.

MIKE FINK

THE TERMINAL IS REQUIRED WHEN USING A MODEM OR OUR FAX/MODEM.  
THE TERMINAL IS REQUIRED WHEN USING OUR BAR-CODE READER.  
THE TERMINAL IS REQUIRED WHEN USING BULLETIN BOARDS.  
THE TERMINAL IS REQUIRED WHEN USING THE MONITOR.CLI

INFORMATION FOR ANY OR ALL OF THESE CHOICES, IS AVAILABLE TO THOSE CUSTOMERS WHO HAVE PURCHASED THESE ITEMS FROM DOMINO CUBES .. OTHERWISE THE Z88 USER HAS NO NEED FOR THAT INFORMATION.

---

AFTER 6 YEARS OF RESEARCH BY THE BEST COMPUTER BRAINS IN ENGLAND, USA, AND EUROPE, TRYING TO MAKE A BIGGER SCREEN OR MONITOR FOR THE Z88 .... A NON-COMPUTER TYPE PERSON, WITH COMMON SENSE, PERSERVERANCE AND KNOWLEDGE OF WHAT A REAL TYPIST NEEDS TO LOOK AT WHILE TOUCH TYPING, HAS DEvised THE BEST, MOST ECONOMICAL AND EASY SOLUTION.

MIKE FINK, THE PRESIDENT OF DOMINO CUBES, HAS CREATED THE ONLY 60 LINE MONITOR FOR PORTABLES. NOT ONLY CAN THE TYPIST SEE WHAT IS BEING TYPED ON THE PRINTERS' PAPER MONITOR, AS TYPING PROCEEDS, BUT A DUPLICATE FILE COPY IS BEING MADE AT THE SAME TIME, ALLOWING FOR EDITING AND MODIFYING.

SEE PIPEDREAM A, P. 22 FOR DETAILS

THE FOLLOWING DESCRIBES THE TYPES OF COMMANDS THAT ARE AVAILABLE IN PIPEDREAM EXPRESSION SLOTS. THEY INCLUDE:

- |                         |                               |
|-------------------------|-------------------------------|
| 1. ARITHMETIC OPERATORS | 4. FUNCTIONS and CONDITIONALS |
| 2. RELATIONAL OPERATORS | 5. "AT" FIELDS AND WILDCARDS  |
| 3. LOGICAL OPERATORS    | 6. DATE STRINGS               |

WHEN USING REPLICATE OR BLOCK COPY, THE SLOT DESCRIPTIONS, ie; COL, ROW, ARE CHANGED ACCORDING TO THE COMMAND. TO KEEP THE SLOT REFERENCE CONSTANT (IF DESIRED), EACH HALF CAN BE "FROZEN" OR "FIXED" BY PRECEDING EACH OR ANY HALF WITH \$ ...

EXAMPLES: \$A\$1 F\$56 \$H34

1. ARITHMETIC OPERATORS:

+	ADD	*	MULTIPLY	-	EXPONENT	+	& - CAN BE
-	SUBTRACT	/	DIVIDE	\	ILLEGAL		USED ON DATES

2. RELATIONAL OPERATORS:

see P.6 FOR EXAMPLES

<	LESS THAN	<>	NOT EQUAL TO	>=	GREATER THAN OR EQUAL TO
>	GREATER THAN	=	EQUAL TO	<=	LESS THAN OR EQUAL TO

When strings are being compared, the following wild cards (as in the Replace and Search commands), can be included. See P.26 MAN-B; P.93 Cambridge

3. LOGICAL OPERATORS:

see P.6 FOR EXAMPLES.

& AND      | OR      ! unary NOT

Boolean FALSE is taken as zero, TRUE as non-zero

3a. ABSOLUTE VALUE      ABS(number)      ABS(-7.9) = 7.9

4a. TRIGONOMETRIC FUNCTIONS

ACS	ARC COSINE	ACS(number)	ANSWER IN RADIANS
ASN	ARC SINE	ASN(number)	ANSWER IN RADIANS
ATN	ARC TANGENT	ATN(number)	ANSWER IN RADIANS
COS (COSINE) COS(RAD(DEG)) YIELDS COSINE WITH DEGREE INPUT			
COS (COSINE) COS(RADIANS) YIELDS COSINE WITH RADIAN INPUT			
SIN (SINE) SIN(RAD(DEG)) YIELDS SINE WITH DEGREE INPUT			
SIN (SINE) SIN(RADIANS) YIELDS SINE WITH RADIAN INPUT			
TAN (TANGENT) TAN(RAD(DEG)) YIELDS TANGENT WITH DEGREE INPUT			
TAN (TANGENT) TAN(RADIANS) YIELDS TANGENT WITH RADIAN INPUT			
DEG(radians) CONVERTS radians TO DEGREES			
RAD(degrees) CONVERTS degrees TO RADIANS			

4b. CONDITIONAL LOGIC COMMANDS see p.6 for more examples

IF(BOOLEAN, THEN, ELSE)

IF( A , B , C ) IF A IS TRUE, B IS SHOWN, IF A IS FALSE, C IS SHOWN

EXAMPLE: ---> IF(6>5, "6 IS BIGGER THAN 5", "TRY AGAIN")

#### 4--> REMAINING SLOT FUNCTIONS:

4c. CHOOSE(list). . .Returns an element from the (list), using the value of the first element as the guide to the place in the remaining elements of the list .. If the list has 9 elements, the first number will dictate which of the 8 remaining will be chosen; EXAMPLE:---- CHOOSE(5,7,"FISH",11,19.4,"CAT",2^3,PI,109)  
 WILL CHOOSE CAT, the 5th element of the remaining 8  
CHOOSE(6,7,"FISH",11,19.4,"CAT",2^3,PI,109)  
 WILL CHOOSE 8.00, the 6th element of the remaining 8  
CHOOSE(2,7,"FISH",11,19.4,"CAT",2^3,PI,109)  
 WILL CHOOSE FISH, the 2nd element of the remaining 8

ERROR MESSAGES: The 1st element must be an integer, with commas between elements  
 Bad index . . . . . when the first element is less than 1  
 Too few arguments . . when the first element is bigger than elements -1  
 Typing error. . . . . when an element is text without quotes, or commas do not match element-1, or when a decimal point in a no. is not.

4d. COUNT(list) COUNTS THE NUMBER OF NON-BLANK EXPRESSION SLOTS IN (list) ...

EXAMPLES OF (lists) .. (3,5,8,16,2,11) (F3F12) (B34H75) (\$D\$3J15)

SLOTS CONTAINING ANYTHING BETWEEN QUOTES, (OR ORDINARY TEXT), ARE IGNORED.

EXAMPLE: ----> COUNT(B7H7) = 3 (list) = (7 SLOTS, B7-->H7)

1 2 "OX" FISH PI 2^3 <-----ROW 7, COLUMNS B-->H  
 / / / / / / /

NO. EMPTY TEXT IGNORED TEXT NO. NO. COUNT ONLY COUNTS EXPRESSION SLOTS THAT  
 B7 C7 D7 E7 F7 G7 H7 HAVE DATA THAT CAN SEEN, AND CHANGED BY  
 \* \* \* <-- THE RECALCULATION COMMAND.

#### 4e. LOGARITHMIC FUNCTIONS

EXP(N) SHOWS e(2.71828183...), to the power N, N = NUMBER

e<sup>-1</sup> as EXP(1) GIVES 2.718281829 EXP(2)=7.38905610

EXP(3.62)=37.3375678

LN(e) = 1 <-----NATURAL LOG REQUIRED FOR NO. IN ( ) LN(EXP(1))  
 LN(10) = 2.302585 <-----NATURAL LOG REQUIRED FOR NO. IN ( ) LN(10)  
 LN(1) = 0 <-----NATURAL LOG REQUIRED FOR NO. IN ( ) LN(1)  
 LN(0) = Log range <-----NATURAL LOG not possible FOR 0 LN(0)

LOG(e) = 0.434294 <-----COMMON LOG REQUIRED FOR NO. IN ( ) LOG(EXP(1))  
 LOG(10) = 1 <-----COMMON LOG REQUIRED FOR NO. IN ( ) LOG(10)  
 LOG(1) = 0 <-----COMMON LOG REQUIRED FOR NO. IN ( ) LOG(1)  
 LOG(0) = Log range <-----COMMON LOG NOT POSSIBLE FOR 0 LOG(0)

THE NATURAL LOGARITHM FOR FOR ANY NO. IS 2.3025809 TIMES THE COMMON LOG  
 THE COMMON LOGARITHM FOR FOR ANY NO. IS 0.43429448 TIMES THE NATURAL LOG

S L O T   F U N C T I O N S   continued

4f. INTEGER ... converts a number to the next lower integer

INT(no.), INT(slot), OR INT(math exp)

EXAMPLES: INT(3/7)= 0.00   INT(3.4)= 3.00   INT(3.9)= 3.00

IF B7 = PI =(3.14);   INT(B7)= 3.00

IF B7 = EXP(1) =(2.718); INT(B7)= 2.00

IF B7 = SIN(45)=(0.851); INT(B7)= 0.00

-----  
4g. LOOKUP(Key,Range1,Range2,) WILDCARDS CAN BE USED IN "Key"

LOOKUP RETURNS THE VALUE IN RANGE 2, CORRESPONDING TO THE POSITION THE KEY OCCURS  
IN RANGE 1. IF NO MATCH, Lookup IS DISPLAYED.

THIS FUNCTION IS COMPLICATED, AND EXAMPLES ARE FOUND ON P.6  
-----

4h. MAX(list) CHOOSES THE MAXIMUM VALUE FROM THE LIST OF SLOTS

.....  
MIN(list) CHOOSES THE MINIMUM VALUE FROM THE LIST OF SLOTS

.....  
SUM(list) SHOWS THE SUM OF THE SLOTS OR ELEMENTS OF THE list

.....  
EXAMPLES OF (lists) .. (3,5,8,16,2,11) (F3F12) (B34H75) (\$D\$3J15)

EXAMPLE: MAX(-3,-6,-7,-1,-45,-12) =

EXAMPLE: SUM(A25+PI+3+11,10,-22,SQR(9)+0   -1

SLOTS CONTAINING NON-NUMERICAL EXPRESSIONS ARE IGNORED.  
-----

WHEN USING REPLICATE OR BLOCK COPY, THE SLOT DESCRIPTIONS, ie; COL, ROW, ARE CHANGED  
ACCORDING TO THE COMMAND. TO KEEP THE SLOT REFERENCE CONSTANT (IF DESIRED), EACH  
HALF CAN BE "FROZEN" OR "FIXED" BY PRECEDING EACH OR ANY HALF WITH   \$   ...

EXAMPLES: \$A\$1   F\$56   \$H34  
-----

4i. PI IS OF COURSE THE CIRCLE CONSTANT = 3.14159265  
-----

4j. SGN(n) DISPLAYS -1, 0 or 1 IF (n) IS NEGATIVE, ZERO OR POSITIVE  
-----

4k. SQR(n) DISPLAYS the SQUARE ROOT OF (n)  
-----

## 5.    "@" FIELDS    ("at" fields)

COL.1	COL.2 ROW	COLUMN 3	COL.4 ROW	COLUMN 5
@D@	1	day of week, day of mos.(no.) mos. year (no.)	1	
@D@	2	Friday 19 AUG 1998	2	
INDEX(5,3)	3		FISH 3	FISH
@P@	4	PAGE NO. FROM OPTIONS PAGE	4	
@T@	5	TITLE FROM OPTIONS PAGE	5	
@SLOT@	6	DISPLAYS WHAT IS FOUND IN SLOT UNLESS SLOT IS	6	..APPLE.
	7	AN "AT" FIELD. AN "AT" FIELD CAN DISPLAY WHAT	7	BANANA
	8	IS FOUND IN A SLOT THAT CONTAINS INDEX(ROW,COL)	8	PEAR..
	9	AND VICA-VERSA. INDEX WILL DISPLAY FROM INDEX.	9	
@E6@	10	..APPLE.	10	
@E7@	11	BANANA	11	
INDEX(5,8)	12		PEAR.. 12	<--INDEX
@C12@	13	SLOT CAN'T CAPTURE INDEX; C12 IS INDEX	13	<--TEXT
INDEX(3,12)	14		PEAR.. 14	INDEX WORKS
@C13@	15	SLOT CAN'T CAPTURE INDEX; C12 IS INDEX	15	TEXT WORKS
@A1@	16	TRIES TO CAPTURE @D@; YIELDS BLANK	16	
@D@	17	Monday 26 August 1996	17	
INDEX(3,17)	18	Monday 26 August 1996	18	

NOTICE THAT INDEX YIELDS RIGHT JUSTIFY UNLESS YOU CHOOSE TO MODIFY IT.

## 5a.    WILDCARDS ARE OF THE FOLLOWING TYPES: (see search and replace)

MATCHES

- ^?    ANY SINGLE CHARACTER - NOT SPACE
- ^#    ANY NUMBER OF NON-SPACE CHARACTERS
- ^S    A SPACE

THE BEST WAY TO LEARN HOW TO USE THESE WILDCARDS ARE TO READ THE MANUALS AND TO EXPERIMENT BY YOURSELF TO MAKE THEM DO WHAT YOU WISH.

*P. 5 & 6  
not ready*